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SAFETY OF THE ROAD SYSTEM

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ABSTRACT

In recent years, with rapid development of economy, and dramatic growth of vehicle population and traffic flow, road traffic accidents in China has declined year on year and experienced from high incidence to basic control and eventual year-on-year decline, and traffic safety has turned better year after year. This paper makes a review of the development and achievement of China's road traffic safety, analyzes the causes of rapid decrease in China's road traffic accidents, and lists a series of measures and policies that Chinese government has taken concerning personnel, vehicle, road, management, law, and science and technology, among others. Such practice in China has proved that high incidence of traffic accidents can be curbed and does not necessarily result from rapid development of economy, as long as targeted policies and measures are adopted.

1. AN OVERVIEW OF ROAD TRAFFIC CRASH IN CHINA

Since the founding of new China, the general trend of road traffic crash in China had been early rise followed by decline. In the early stage of new China, the total number of road traffic crashes was relatively small. But road traffic crashes rose dramatically after the implementation of reform and opening-up policy. The year 2002 witnessed a record high of road traffic crashes, with up to 562,074 injuries and 109,381 deaths nationwide.

The mechanism of inter-ministerial joint conference on nationwide road traffic safety was approved by the State Council on October 22, 2003. Road traffic safety in China entered a new stage. *The Law of the People's Republic of China on Road Traffic Safety*, which was adopted at the 5th Session of the Standing Committee of the Tenth National People's Congress of the People's Republic of China on October 28, 2003, came into force on May 1, 2004. Meanwhile, Chinese government has taken a series of measures in aspects of personnel, vehicle, road, management, and technology to improve road traffic safety. With the rapid development of national economy and vehicle population, there was, however, a turning point in road traffic safety in China. Road traffic crashes experienced high incidence, basic control and eventual year-on-year decrease. As a result, traffic safety improved year after year. From 2005 to present, road traffic crashes in China have decreased sharply, and all six indicators of traffic crash: number of traffic crashes, number of deaths, number of injuries, mortality rate per ten thousand vehicles, mortality rate per hundred thousand populations, and direct economic losses have declined in varying degrees (note: According to *the Law of the People's Republic of China on Road Traffic Safety*, there have been considerable changes in the statistics of road traffic crashes in China since the year 2004.). The year 2009 witnessed 238351 road traffic crashes, which resulted in 67759 deaths, 275125 injuries, and direct economic loss of 910 million Chinese Yuan. Mortality rate per ten thousand vehicles decreased to 3.6, and mortality rate per hundred thousand populations dropped to 5.08. Road traffic safety improved further, as the six indicators of traffic crashes in 2009 decreased 10.13%, 7.79%, 9.77%, 9.90%, 16.86% , and 8.69% respectively, compared with those in 2008.

The years from 1978 (when reform and opening-up started) to 2002 witnessed the fastest

growth of road traffic crashes in China. The year 2002 set a traffic crash record. The number of road traffic crashes was 6.21 times as many as that in the early stage of reform and opening-up; the number of deaths was 4.73 times as many; the number of injuries was 6.26 times as many.

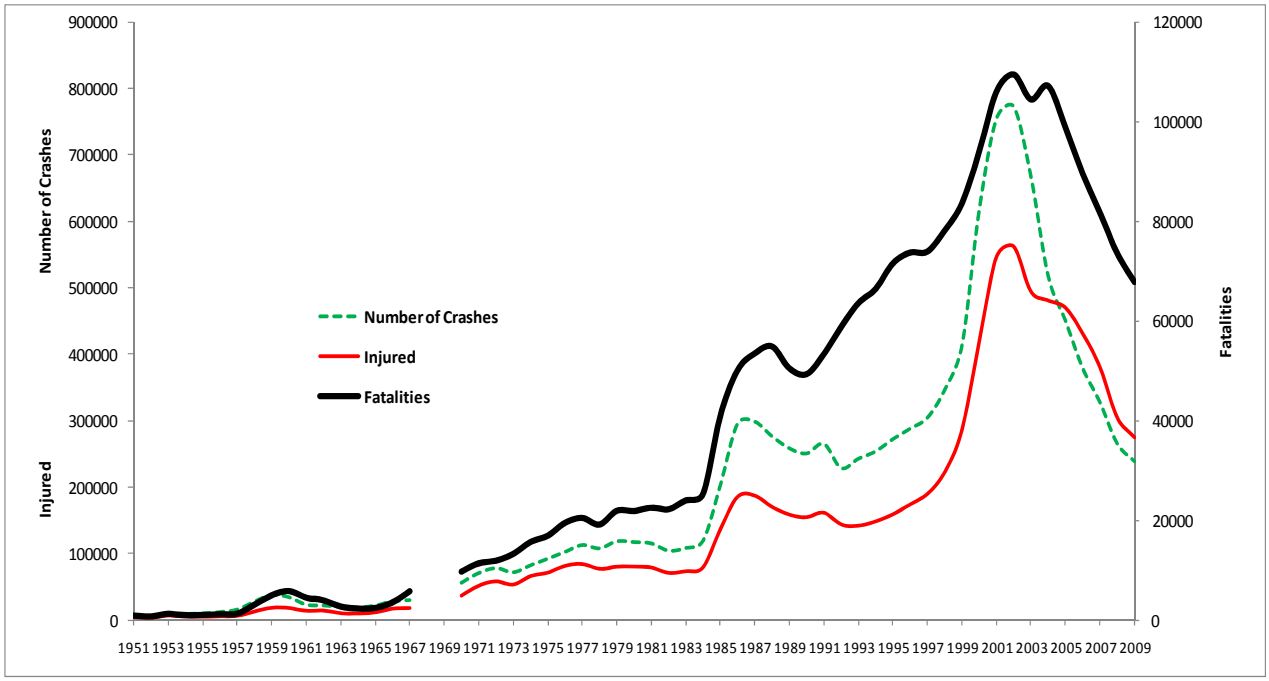

Figure 1 Changing Trend of Road Traffic Crash in China since the Founding of New China (1951 ~ 2009)

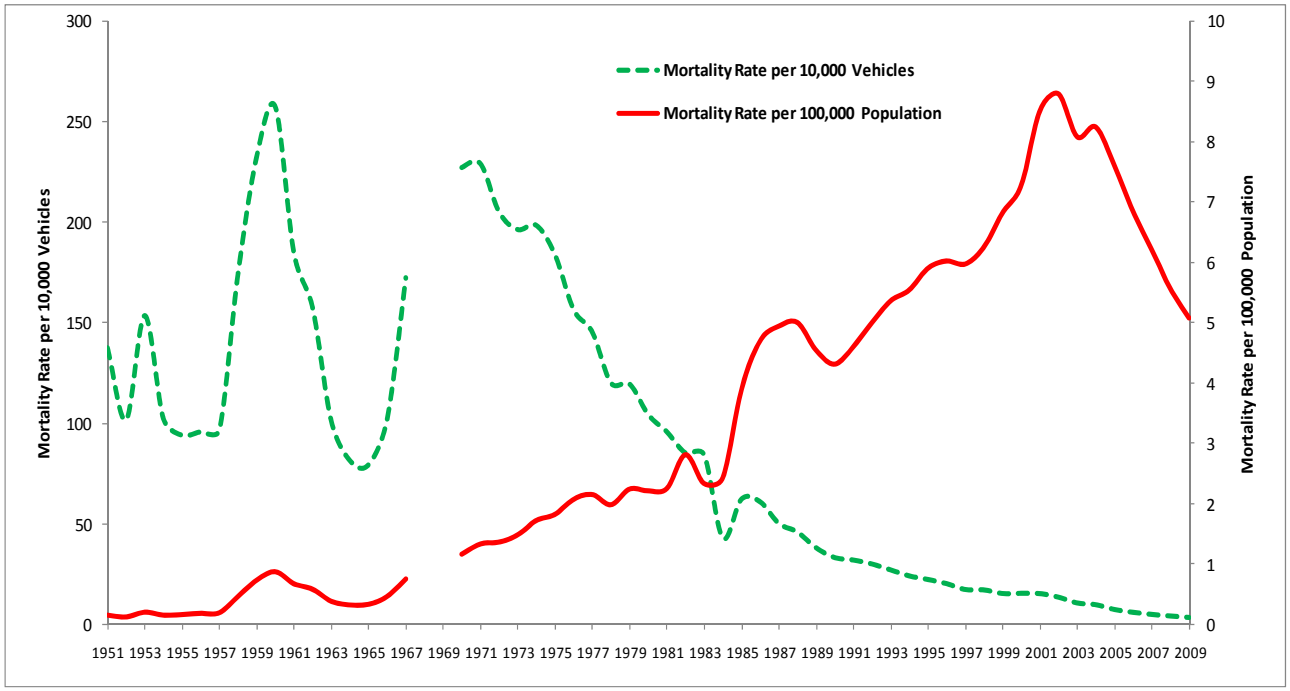

Figure 2 Changing Trend of Road Traffic Crash Rate in China since the Founding of New

China (1951 ~ 2009)

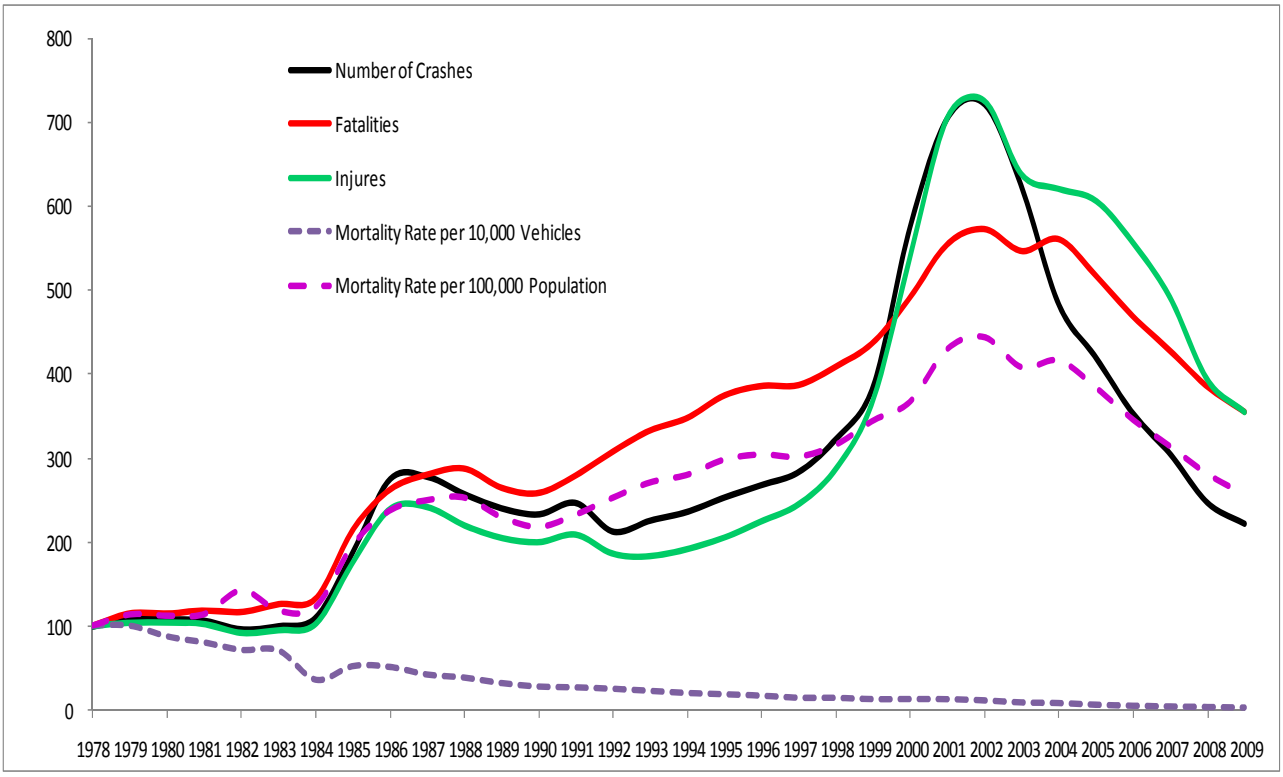

Figure 3 Changing Trend of Road Traffic Crash in China since the Year when Reform and Opening-up Policy was Implemented (The year 1978 witnessed 100 crashes.)

The years after 2002 witnessed the fastest decrease of road traffic crashes in China (The year 2004 saw a small increase.). Compared with the record high of road traffic crashes in 2002, the year 2009 witnessed decreases in the number of road traffic crashes, number of deaths, and number of injuries, down 69.17%, 38.05%, and 51.05% respectively. The year 2009 witnessed similar number of crashes as that of the year 1994. But the number of crashes in 2009 increased considerably, compared with that in 1978, with an increase of 122.24%, 254.83% and 255.13% respectively in number of crashes, number of deaths, and number of injuries from that of the year 1978.

With the rapid increase of vehicle population since 1978, mortality rate per ten thousand vehicles in road traffic crashes has been in constant and fast decline. Mortality rate per ten thousand vehicles in 2009 is 3.6, which is only 3 percent of that in 1978. As Chinese population grew slowly, the changing trend of mortality rate per hundred thousand populations was in accordance with the changing number of deaths in road traffic crashes.

2. ACHIEVEMENTS IN ROAD TRAFFIC SAFETY

2.1 Total Number of Traffic Crashes Decreases Continuously

As the *Law of the People's Republic of China on Road Traffic Safety* was adopted, and more attention was given by government to road traffic safety with a series of measures, road traffic crashes tend to decrease rapidly in recent years.

Despite the trend of rapid decrease, road traffic crashes in China still involved lots of injuries and death because they held a big total number. In 2009, road traffic crashes caused 67759 deaths and 275125 injuries. A review of the changes in the number of deaths caused by road traffic crashes in countries with high crash-induced deaths in the world finds that China topped the world in the number of deaths caused by road traffic crashes in three time periods, from 1986 to 1988, from 1992 to 1995, and from 1999 to 2005. Since 2006, China still has had a relatively big base number of deaths caused by road traffic crashes, though India has surpassed China as the top country with the most deaths caused by road traffic crashes in the world.

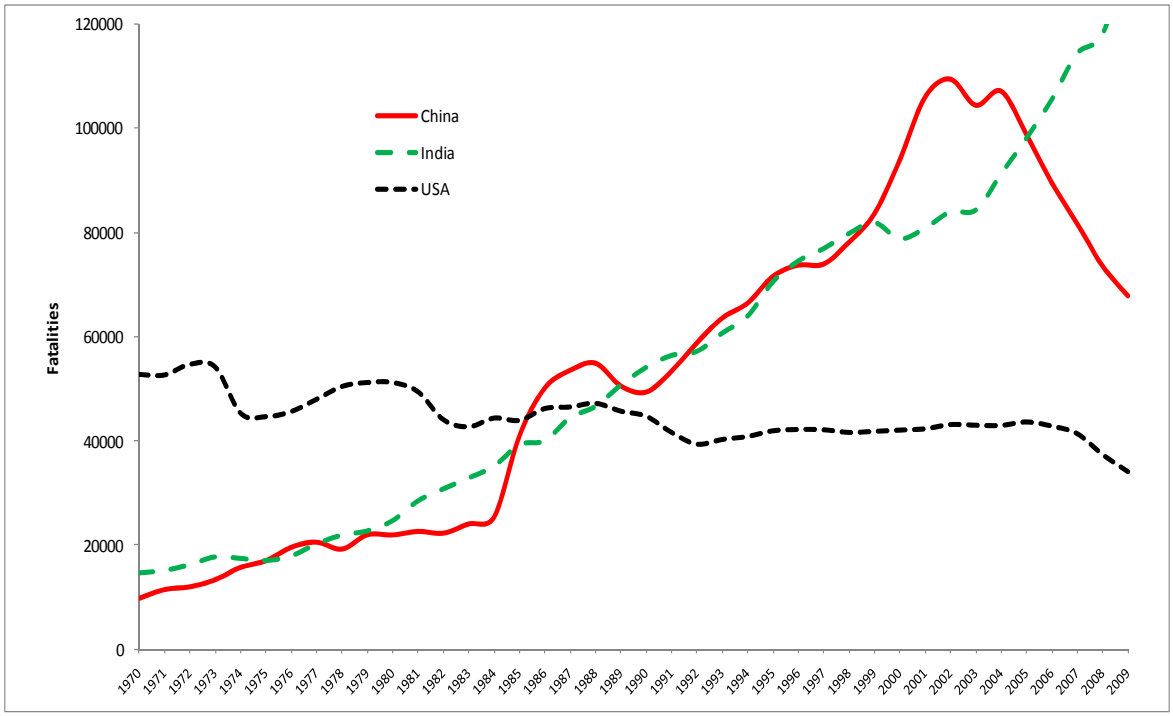

Figure 4 Changes in the number of deaths caused by road traffic crashes in China, India, and the U.S.A. since 1970 (1970 ~ 2009)

2.2 Stable Decline in Road Traffic Crashes

In the past several years, road traffic crash rate has been in stable decline, as the total number of road traffic crashes decreased. Crash rate per one hundred million vehicle kilometers and fatality rate per 100 million vehicle kilometers can objectively represent road traffic safety status. National highway network and expressway, for example, which undertake a majority of transportation in China, have witnessed an apparent decline in both

crash rate per one hundred million vehicle kilometers and fatality rate per one hundred million vehicle kilometers in recent years. The crash rate per one hundred million vehicle kilometers in national highway network and expressway dropped to 7.3 and 3.1 respectively, while fatality rate per one hundred million vehicle kilometers fell to 3.0 and 1.7 respectively.

The continuous decline in the number of deaths in road traffic crashes and the traffic crash rate strongly suggests that road traffic safety in China is gradually turning better. This is a hard-earned achievement accomplished with the rapid development of China's economy and motor vehicle population.

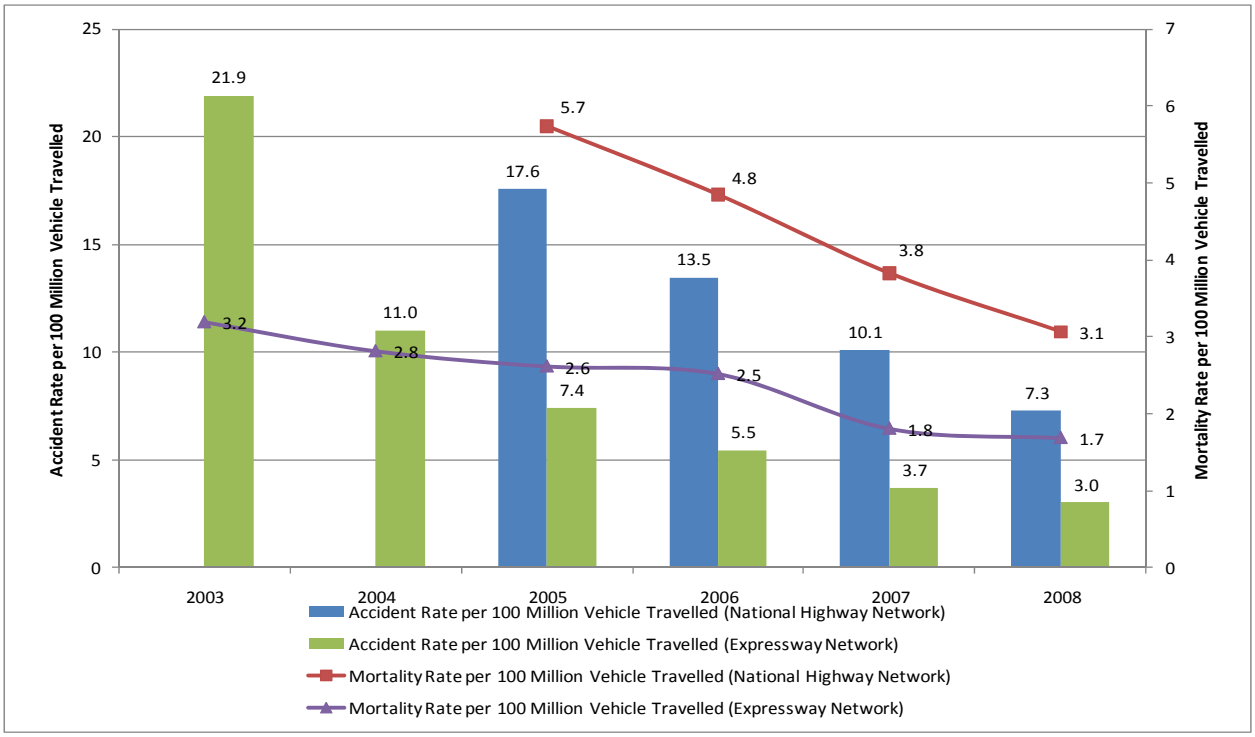

Figure 5 Changes of crash rate on national highway network and expressway

3. BACKGROUND FOR BETTER ROAD TRAFFIC SAFETY

Better road traffic safety in China is a hard-earned achievement accomplished with the rapid development of China's economy and motor vehicle population, and the great changes of road traffic safety environment.

3.1 Rapid Development of Road Traffic

In 1978, the total highway operating mileage in China amounted to 890.2 thousand kilometers, and highway density is 9.3 kilometers per one hundred square kilometers. The total highway mileage is ten times as long as that in the early days after China was newly founded, but there were only a few high-grade highways. And Class II highway was only about ten thousand kilometers long. Highway traffic had for a long time lagged behind the development of national economy and the whole society. Following the reform and opening up, historical transformation began to occur in the construction of highway infrastructure.

From the end of 1980s to early 1990s, the Central Government regarded it as a strategic and urgent task to promote the development of traffic and transportation. Highway traffic embraced a historic development opportunity. Since the Eighth Five Year Plan was launched, China's highways have entered a new era of rapid development, large-scale construction, and application of more and more technologies. Within only five years, highway mileage totaled 25 thousand kilometers. In the years after 1998, highway construction had entered a new era of rapid development, as the national government sped up infrastructure construction with positive fiscal policy in the face of the Asian financial crisis. By the end of 2002, total highway operating mileage nationwide had amounted to one million seven hundred sixty thousand kilometers, and the density of highway network is 18.3 kilometers per one hundred square kilometers. Technical grade of highways all over the country has been improved a lot. The bottleneck constraint of highways on national economic development has been mitigated greatly, while the gap between developed countries and our country has been narrowed considerably.

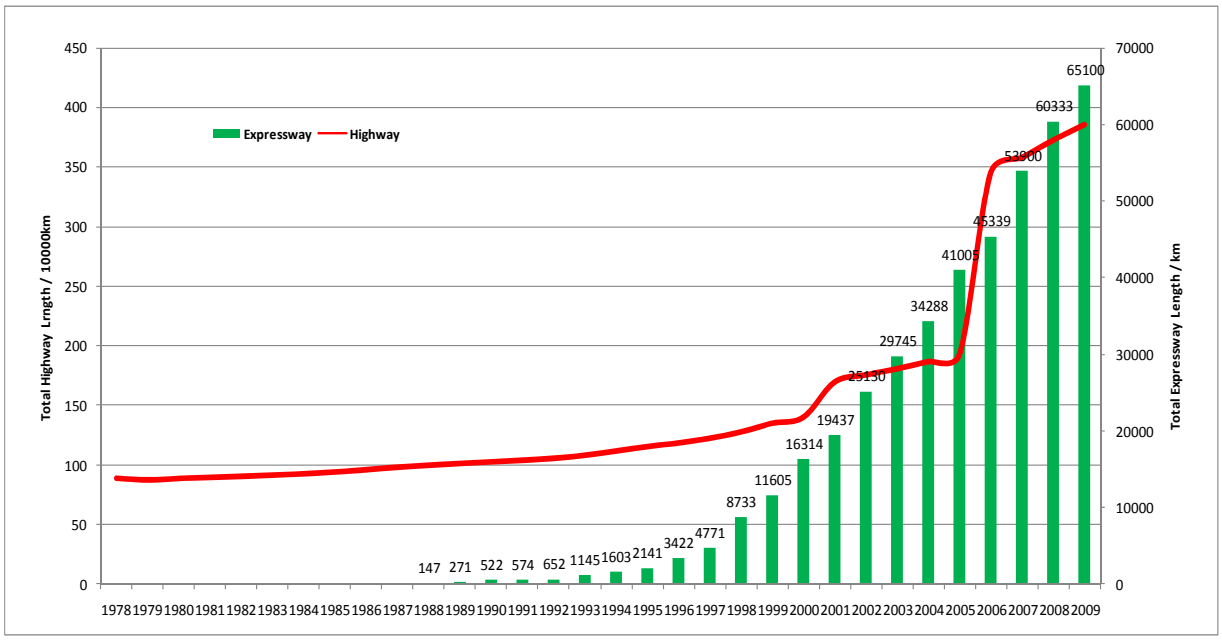

Figure 6 Developmental process of national highway traffic since1978 (1978 ~ 2009)

Since 2003, Ministry of Transport of the People's Republic of China has launched the largest scale construction of rural highways to support the building of a new socialist countryside, with the release of *National Expressway Network Plan* and *National Rural Road Construction Plan*. After fifteen years of constant efforts, "Five vertical and Seven horizontal" national trunk roads with a total mileage of 35 thousand kilometers, which was launched in the period of the Eighth Five Year Plan, opened 13 years ahead of schedule. By the end of 2009, total highway mileage nationwide has reached three million eight hundred sixty thousand and eight hundred kilometers (including 1830-thousand-kilometer-long village highways), among which expressway mileage amounted to 65.1 thousand kilometers and mileage of highway of Class II and above was 425.2 thousand kilometers which accounts for 11 percent of the total. National highway density was 40.22 kilometers per one hundred square kilometers. Bottleneck constraint of

highway traffic on national economic development mitigated effectively. Highway traffic played a more important role in comprehensive transport system.

By the end of 2009, total mileage of urban roads had amounted to 267 thousand kilometers, up 28.4% from 2003.

3.2 Rapid Increase in Motorization Level

As reform and opening up was promoted further, the economy and society developed rapidly, and people's living standard rose gradually. And profound changes happened in people's ways of life. House, car, telecommunications, and tourism, among others, have become the leading consuming products. As people spent more in transportation, car began to enter families.

From the early stage of new China to the year 1978, there was a slow increase in motor vehicle population. By contrast, the years from the year 1978 when reform and opening up policy was adopted to 1983 witnessed a moderate growth of motor vehicle population, with an average annual growth of 250 thousand motor vehicles. With gradual promotion of reform and opening up, motor vehicle population experienced rapid growth from 1981 to 1996, breaking the record of 10 million. By the end of 2006, motor vehicles totaled 36 million 96 thousand 5 hundred, with an average annual growth of two million five hundred and eighteen thousand six hundred motor vehicles. In the years after 1997 when reform and opening up was further promoted, there has been a skyrocketing growth of motor vehicle population. In 2004, motor vehicles increased beyond one hundred million. By the end of 2009, motor vehicle population had added up to one hundred eighty six million.

From the year 1978 when reform and opening up policy was adopted to the end of 2009, growth of motorization level was roughly in accordance with the growth rate of GDP. Average annual growth rate of motor vehicles is 17.86 percent, a little bit higher than average growth rate of GDP in the same period. Average annual increase rate of motor vehicle population was 14.90 percent, and annual increase rate of the total number of car drivers was 15.88 percent. With the rapid increase of motor vehicle population came the fast growth of motorization level in China. In 1978, the number of motor vehicles per one thousand people is only 2.8 in China. In the end of 2009, the number of motor vehicles per one thousand people is 139.8, with an average annual growth rate of 14.5 percent.

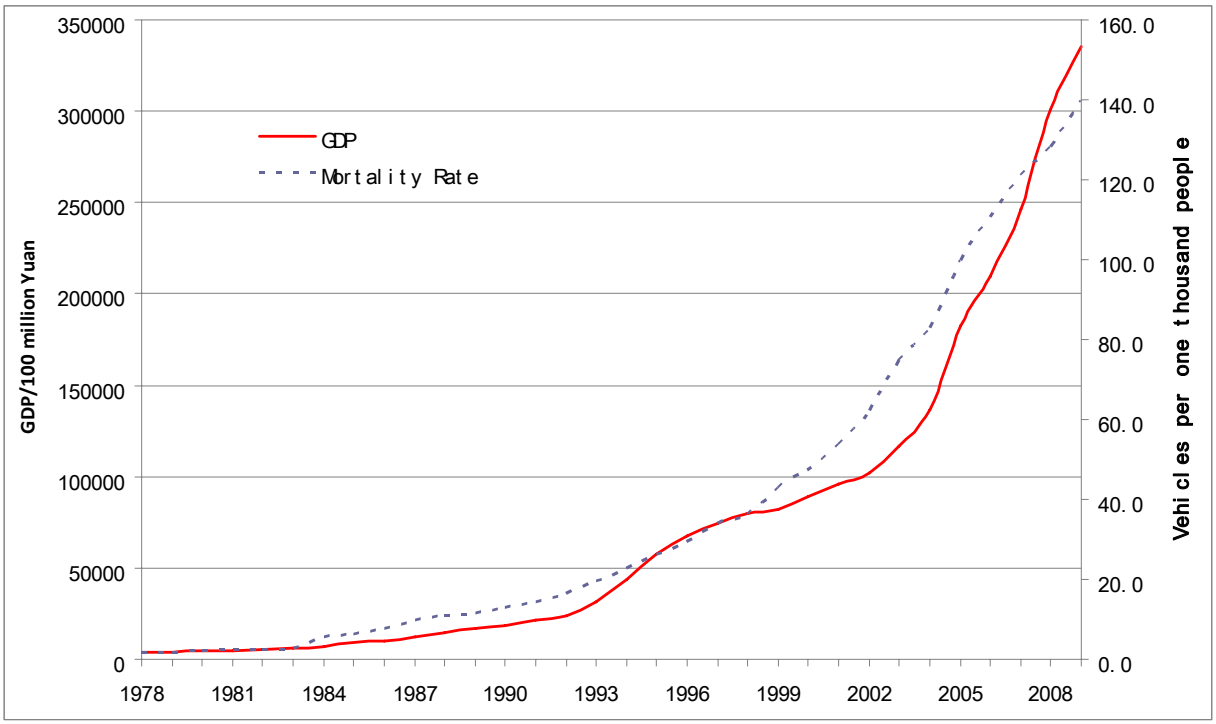

Figure 7 Development of national motorization level and GDP since the year when Reform and Opening up was launched(1978～2009)

Table 1 Growth of Motor Vehicle Population since 1978

	The end of 1978	The end of 2009	Annual growth rate (%)
Motor vehicle population(ten thousand)	158.87	18658.07	17.86%
Motor vehicle population(ten thousand)	135.84	7619.31	14.90%
Driver (ten thousand people)	192.45	13820.39	15.88%
Motorization rate(vehicles per one thousand people)	2.80	139.80	14.50%
GDP(one hundred million Yuan)	3624	335353	16.90%

3.3 Great Changes in Motor Vehicle Drivers

As motor vehicle population grew and cars gradually came into families, great changes have taken place in motor vehicle drivers compared with those who are behind the wheel in the early stage of reform and opening up.

In 1978 there were one million nine hundred twenty four thousand five hundred car drivers. A vast majority of drivers were professional drivers who play a leading role in traffic crashes. In 2009, the number of motor vehicle drivers amounted to one hundred ninety-nine million seven hundred sixty-five thousand and eight hundred eighty-nine, among whom car drivers

were one hundred thirty-eight million two hundred and three thousand nine hundred eleven. The number of car drivers accounted for 69.18 percent of the total, and was 1.81 times as many as car population. In terms of driving experience, the number of people with less than three years of driving experience was sixty-nine million four hundred thirty-three thousand one hundred fifty-eight, which accounted for 34.76 percent of the total. Among them, the number of those with less than one year of driving experience was twenty million eight hundred eighty-eight thousand two hundred fifty-four, which accounted for 10.46 percent of the total number of motor vehicle drivers nationwide. Currently, professional drivers are no longer the majority of motor vehicle drivers. In 2008, private-use vehicles' involvement in crashes accounted for 58.72 percent of the total, and the involvement of vehicles for production and operation in crash accounts for 34.35 percent of the total.

4. EFFORTS BY CHINESE GOVERNMENT TO FULLY IMPROVE ROAD SAFETY

Since 2005, road traffic safety conditions have turned better gradually, with dramatic decline in road traffic crashes. This scenario resulted from constants efforts by Chinese government to improve road traffic safety. Since 2003, Chinese government has decided for the first time to take measures to improve road traffic safety. The pattern of work characterized by uniform leadership, specific functions performed by concerned agencies, joint management, comprehensive administration, and seeking of both a temporary solution and a permanent cure. A series of systematic and targeted measures have been taken to curb the high incidence of road traffic crashes in China. Within a short period of time road traffic safety conditions improved. The Party and government paid special attention to road traffic safety and took lots of effective measures, which is the fundamental reason for the quick improvement of road traffic safety in China.

4.1 Central Government Set Goals for Road Traffic Safety

On September 5, 2003, the State Council held TV & phone conference, deciding for the first time on behalf of the State Council to address the issue of road traffic safety, and presenting the goal of turning road traffic crashes from high incidence to basic control and eventual year-on-year decline in this term of government (2003 --2007).

On April 30, 2008 when a new term of government came into power, Vice Premier Zhang Dejiang put forward the goal of road traffic safety in new stage at the inter-ministerial joint conference on road traffic safety, that is, to ensure further decrease in the number of road traffic crashes especially those involving mass injuries and mass deaths, and in the number of deaths and injuries within the term of this government (2008- 2012). Road traffic safety conditions have been improved further, making more contributions to economic and social development and social harmony.

4.2 Establishment of the Inter-Ministerial Joint Conference on Nationwide Road Traffic Safety

In order to strengthen the organization and leadership of nationwide road traffic safety and coordinate and integrate departmental functions, so that road traffic safety keeps in pace with social and economic development, the establishment of Inter-Ministerial Joint

Conference on Nationwide Road Traffic Safety (hereafter referred to as Joint Conference) was approved by the State Council on October 22, 2003(Letter No. 110 [2006] of the State Council).

Joint Conference, led by the State Council, tracks road traffic safety conditions in China, analyzes road traffic safety status, studies policy, makes medium and long-term strategic plan, comprehensively coordinate and study road traffic safety, make decisions on road traffic safety, direct and supervise the work on road traffic safety by government of directly administered city, autonomous region, and province and their respective functional agencies. The duty of Joint Conference also includes coordinate to solve road traffic safety issue involving concerned agencies, promote cooperation an coordination between agencies to share information and build effective long-term mechanism, prevent and reduce road traffic crashes, and fully improve road traffic safety.

4.3 Improvement of Related Laws, Regulations, and Rules

The Law of the People's Republic of China on Road Traffic Safety, which was adopted at the 5th Session of the Standing Committee of the Tenth National People's Congress of the People's Republic of China on October 28, 2003, came into force on May 1, 2004. On March 21, 2006, the State Council issued *the Regulation on Compulsory Traffic Crash Liability Insurance for Motor Vehicles*, establishing compulsory traffic crash liability insurance system for motor vehicles. In order to help implement *the Law of the People's Republic of China on Road Traffic Safety,* more than fifty local rules and regulations, over sixty departmental regulations, and over one hundred fifty national and industrial technical standards have been adopted or revised.

4.4 Undertaking Project-Oriented Administration of Traffic Safety

From 2004 to 2009, public security agencies all over the country worked together with other concerned departments to take lots of intensive measures to check and punish those who seriously violated traffic law with actions like speeding, overloading, drunk driving, driving while exhausted, driving without a license. In those years average annual cases checked and punished amounted to nineteen million in speeding, one million in drunk driving, three million and two hundred thousand in driving without a license. The number of traffic crashes caused by violation of traffic law in such acts as speeding and drunk driving declined by over 10 percent in average annually. Average annual decline of traffic crashes involving school bus and students stood at 17 percent. In 2009 detection rate for hit and run cases in traffic crashes is 87.9 percent, among which detection rate for cases involving deaths is up to 90.2 percent.

4.5 Improving Drivers' Driving Skills

Transportation agencies focused on improving drivers' safety awareness and operating skills, took measures such as market regulation, bettering training method, enhancing effectiveness of training, improving supervisory mechanism, and strengthening publicity to conduct a systematic quality-oriented education for drivers. They closed down over 1900 unqualified training schools for motor vehicle and tractor drivers and dismissed over 9700 unqualified trainers. As a result, training market for drivers was regulated and improved.

Based on advanced experience from abroad and full study and research of actual practical situations, they put forward *Motor Vehicle Driver Training Regulations* and *Guideline for Driver's Quality Education* and published book volume of *Safe Driving Starts Here*. Since 2003, motor vehicle drivers with less than three years of driving experience have had a decreasing involvement in traffic crashes, with an average annual decrease rate of 5.5 percent.

4.6 Strengthening Management of Transportation Sector

Operation qualification of transport enterprises has been fully reviewed, technical conditions of operating vehicles and qualification of personnel strictly checked, the quality credit mechanism for road transport improved. A group of transportation vehicles unable to ensure safe production have been driven out of market. Business license of 234 enterprises have been suspended. Consequently, safety management of transport enterprises has been improved gradually.

Directed at major traffic crashes caused by oversize and overload of transportation vehicles, eight ministries and commissions such as Ministry of Transport, Ministry of Public Security, and National Development and Reform Commission have intensively regulated vehicles' oversize and overload since 2004. Oversize rate of freight vehicle in national artery highways has decreased from over 80 percent to about 6 percent. Vehicles' oversize and overload has been curbed effectively, and road traffic safety conditions have improved conspicuously.

Ministry of Transport issued *Provisions on the Administration of the Road Transport of Dangerous Goods,* and market access was strictly controlled. Till April 2006, transportation enterprises transporting dangerous goods approved by transport agencies have totaled 6038. They have all met the qualification requirement. They have special vehicles of one hundred thirty thousand four hundred and seventy-eight, all of which have met the standard for grade-one vehicle. Personnel numbered three hundred and fifty-three thousand, all of who held license. The business scenario for China's road transport of dangerous goods is becoming professional with intensive operation and large scale.

4.7 Improving Safety Performance of Motor Vehicles

Seven measures have been taken to improve safety performance of motor vehicles. First, actions are taken to prevent production and sale of fake car parts. Secondly, management of vehicle conversion for transportation vehicles is strengthened, and over four thousand enterprises in business of illegal vehicle conversion are closed down or their business licenses are suspended. Thirdly, adjustment is made to transport force, and upgrade of passenger cars is promoted to improve comfort, operation safety, and transport safety. Freight vehicles change in types to reduce energy consumption, improve transport efficiency, and ensure transport safety. Fourthly, technical test of motor vehicles' safety is strictly conducted. Fifthly, safety administration of agricultural motor vehicles is strengthened, and the rate of registration and examination of agricultural motor vehicles and the rate of licensed drivers are improved. Sixthly, C-NCAP is set up to promote enterprises to develop and produce vehicles with higher safety standard. Seventhly, recall

system for defective cars is established and implemented. Three million and two hundred thousand defective cars have been recalled so far in China.

4.8 Regulatory Project for Safety of Traffic Infrastructure

4.8.1 Highway Safety Guarantee Project

In 2004, Ministry of Transport began to launch a three-year highway safety guarantee project with the theme of “removing potential danger and valuing people’s lives” for national and provincial artery highways. In 2007, highways in county and town were also included in the highway safety guarantee project. Several years of examination and regulation lead to effective treatment of dangerous parts of many highways. Since 2004 14.7 billion and four hundred million Yuan has been poured into highway safety guarantee project, treating four hundred twenty-four potentially dangerous parts of highway with a mileage of one hundred thirty-four kilometers. Highway safety guarantee project ensured safe running of vehicles on highways, and helped to further improve China’s road traffic safety conditions. Crashes on national highways with w-wave guardrail, concrete barrier, or protection block declined 12.4 percent, 11.2 percent, and 19.7 percent respectively in 2007.

4.8.2 Renovation Project for Dangerous Bridges

By the end of 2009, China’s highway bridges have amounted to six hundred twenty-one thousand nine hundred, most of which was built in the past ten or twenty years. Due to the aging, structural damage, and relatively low design standard for bridge, some bridges turned dangerous and posed potential threat to traffic safety. Ministry of Transport decided in 2007 to invest more in renovating potentially dangerous bridges. Renovation of potentially dangerous bridges began in 2008. According to the principles of important ones first, general ones second, national and provincial artery highways first, highways in county and town second, long-span bridges first, short-span bridges second, it was planned to roughly complete the task of renovating all dangerous bridges on existing national and provincial artery highways, as well as major ones among dangerous bridges on highways in county and town in three years.

4.9 Improvement of Emergency Response

4.9.1 Forecast of Weather Disasters

Safety and smoothness of highway transport are increasingly impacted by unfavorable weather conditions like fog, snow storm, and torrential rain, natural disasters like mudslide, landslide, and water damage, and leakage of dangerous goods in transportation. In July 2005, Ministry of Transport of the People’s Republic of China and China Meteorological Administration signed *Work Memorandum on Joint Weather Forecast by Ministry of Transport of the People’s Republic of China and China Meteorological Administration.* According to the memorandum, related weather information will be issued timely based on weather disasters that impact China’s highway most like water damage and fog, torrential rain in large areas in flood period, and monitoring of fog along highways. The system of emergency response, information feedback and evaluation is built. Early warning of weather disasters affecting roads nationwide and related road traffic information shall be jointly issued by China Meteorological Administration and Ministry of Public Security.

4.9.2 Developing Emergency Response Plan

Ministry of Transport developed *Highway Emergency Response Plans in the Event of Crashes*, built a platform for management of and response to highway network an ministerial and provincial level, strengthened the monitoring of road network operation and issue of information on road conditions. The ability to prepare for and handling emergency has been improved. Major social damage caused by highway traffic emergency has been curbed, reduced, or removed. Highway traffic has been restored and smooth flow of traffic has been ensured. According to incomplete estimate, emergency response plans for traffic management made by 97.9 percent of municipal governments and 92.8 percent of county governments in China totaled 1813. Local governments are directly responsible for management of traffic emergency response, minimizing the impact of harsh weather and unexpected incidents on road traffic safety. Timely on-site rescue in road traffic crashes saved twenty-five thousand lives in China in 2008.

4.10 Improving Publicity and Education for Traffic Safety

As traffic safety publicity plays an important role in preventing and reducing road traffic crashes, Ministry of Public Security decided that traffic safety publicity, with the theme of *valuable life and safe travel,* was promoted across the country, from October 20, 2004 to the end of February, 2005, with *five entries*, meaning entering countryside, enterprise, school, and family. This act was intended to raise traffic participants' awareness of traffic safety and self-protection and reduce and prevent traffic crashes.

4.11 Supporting Role of Technology in Safety Improvement

In order to curb the high incidence of China's road traffic crashes and provide technical support for road traffic safety, Ministry of Transport of the People's Republic of China organized and conducted a series of basic research on traffic safety, accomplished a lot of applied achievements, and provided technical support for highway traffic safety according to traffic safety conditions, and construction and management requirements of China's low-grade highways. In 2004 Ministry of Transport set up a research project titled study of applied technologies for highway traffic safety, with investment of thirty million Chinese Yuan(about forty million five hundred thousand dollars), which was intended to provide safety design methods and sustainable and improved set of applied technologies that are practically useful and analyzed in qualitative and quantitative ways for project technicians and management staff to identify and improve highway traffic safety. This project played an important role in giving technical support to better China's road traffic safety.

Aimed to achieve a safe and harmonious road traffic environment, put to full play import supporting role of technological innovation in ensuring traffic safety, and develop road traffic safety guarantee technology and standard and a system for sustainable development that is in accordance with national conditions, Ministry of Science and Technology, Ministry of Public Security, and Ministry of Transport jointly made *scientific action plan for national road traffic safety*, which, officially launched on February 28, 2008, was the project with biggest investment on road traffic safety. According to *scientific action plan for national road traffic safety,* sector barriers were broken. The two functional departments for traffic safety, Ministry of Public Security, and Ministry of Transport, were integrated with their respective

resources. The mechanism of sharing data and resources was built. Based on technological innovations, the two departments cooperated with each other, pooled the wisdom and efforts of everyone, and worked together to improve safety of China's highway system.

China is now planning to build key national laboratory for road traffic safety, which is expected to be a comprehensive test base for China's road traffic research and a test platform for studying better road traffic system. This laboratory is also to be an important base for conducting advanced research and development of road traffic safety, pooling and educating excellent technological talents, promoting high-level academic exchanges on road traffic safety and application of technologies for road traffic safety.

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