

# PEOPLE'S REPUBLIC OF CHINA

## ROAD SAFETY PROFILE



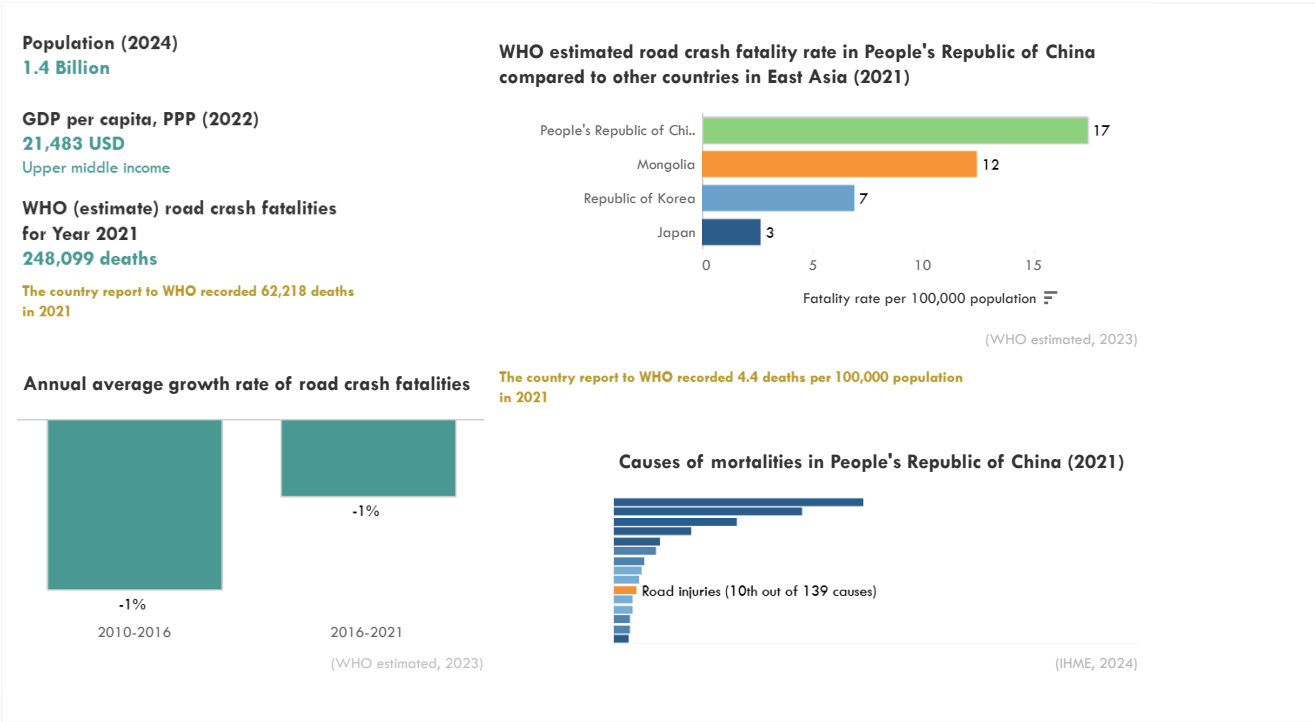
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The ATO road safety profiles offer insights into the road safety in 37 Asia-Pacific countries by utilizing road safety related data from various sources and policy information extracted from a range of documents.

These road safety profiles were developed by the Asian Transport Observatory in collaboration with the Asia Pacific Road Safety Observatory (APRSO) and the International Road Federation (IRF). This September 2025 edition updates the February 2025 release—prepared for the Global Ministerial Conference on Road Safety in Marrakech—to inform discussions at the Asia-Pacific Regional Road Safety Conference in Manila.

### Country Summary

Road safety in People's Republic of China is complex, characterized by progress and persistent challenges. In 2021, road traffic incidents in People's Republic of China resulted in approximately 250 thousand fatalities, marking a significant public health concern as these injuries accounted for 10th highest cause of total deaths in the country. This narrative explores the current state of road safety in People's Republic of China, examining data discrepancies, the insights gleaned from disaggregated data, economic costs, motorization trends, benchmarking against regional averages, and the existing policy landscape.



Data discrepancies are a significant challenge in assessing People's Republic of China's road safety situation. For instance, reported fatalities for 2021 vary. The WHO estimated about 250,000 fatalities, while country official yearbook indicate 62,000 deaths.

### Road crash fatality rate, by source

WHO (estimate) for Year 2021

**17.4 per 100,000 population**

WHO (country-report) for Year 2021

**4.4 per 100,000 population**

Country official statistics for Year 2022

**4.3 per 100,000 population**

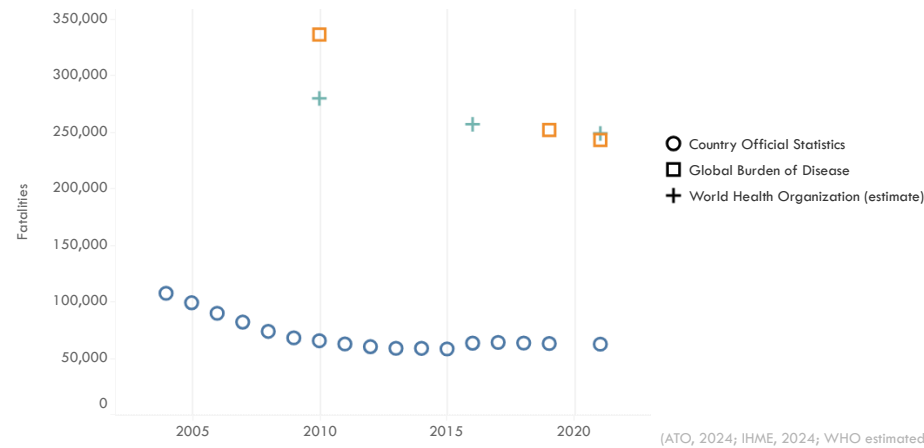
GBD estimate for Year 2021

**17.0 per 100,000 population**

(WHO estimated, 2023)

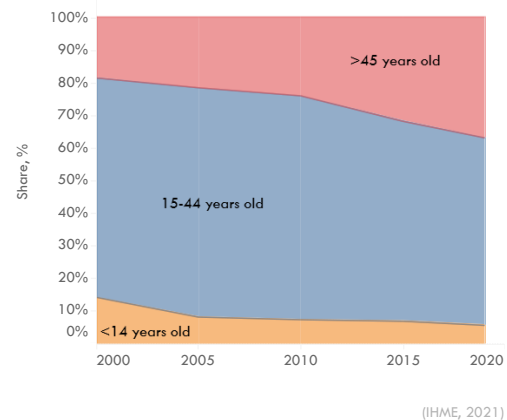
**Every 1 minute, someone dies in a road crash in People's Republic of China**

### Road crash fatalities, by source

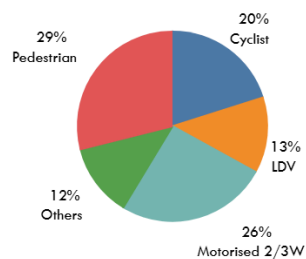


Analyzing disaggregated data provides valuable insights into specific risk groups and crash characteristics. The share of female fatalities increased slightly, while the combined share of minors (<14 years old) and seniors (>65 years old) in road crash fatalities made a noticeable increase from 39% to 43% in 2015 to 2020. Notably, pedestrians and bicyclists constitute close to half of People's Republic of China's total road traffic crash fatalities, exceeding the Asia-Pacific average.

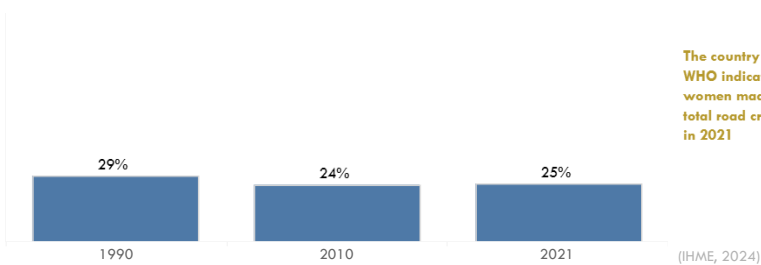
### Road crash fatalities, share by age group



### Road crash fatalities, share by road user

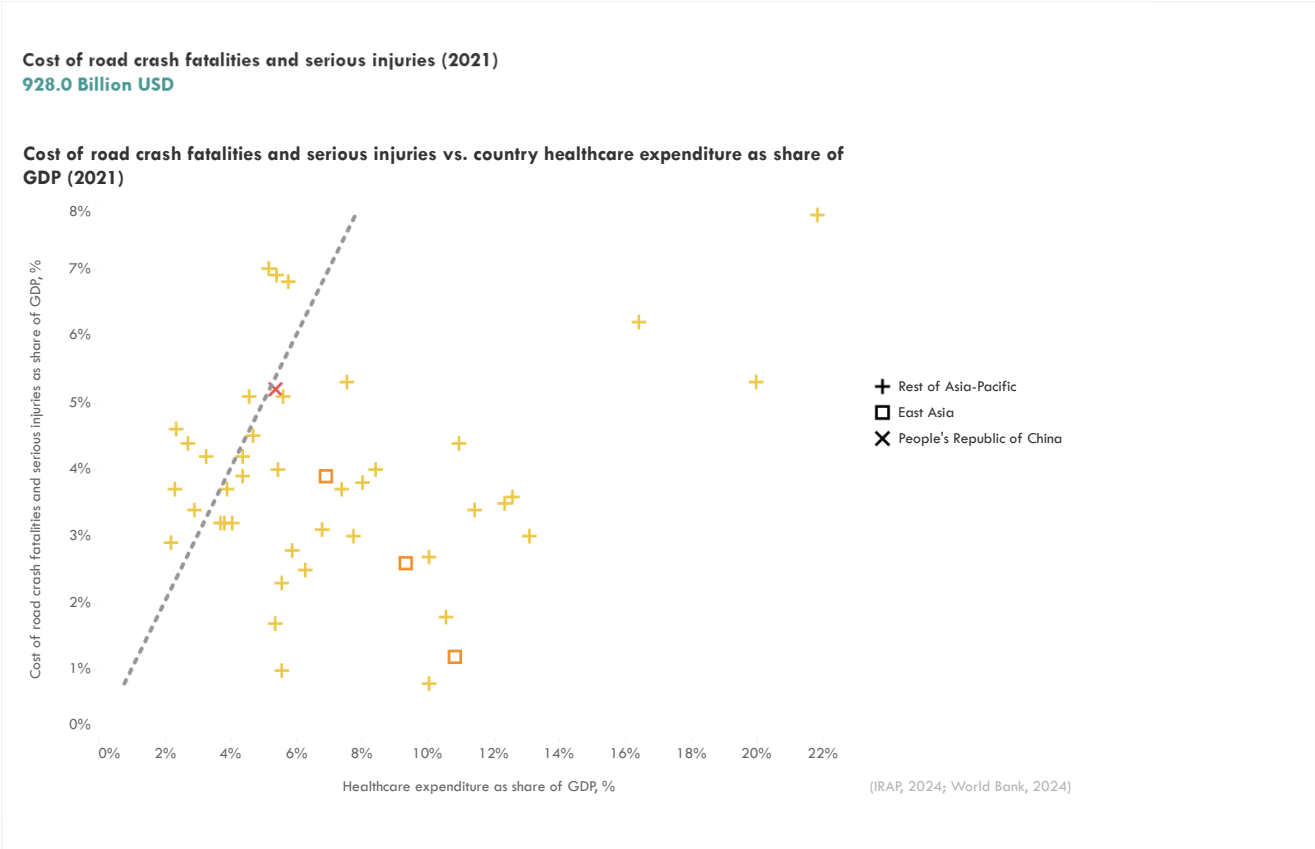


### Share of female road crash fatalities

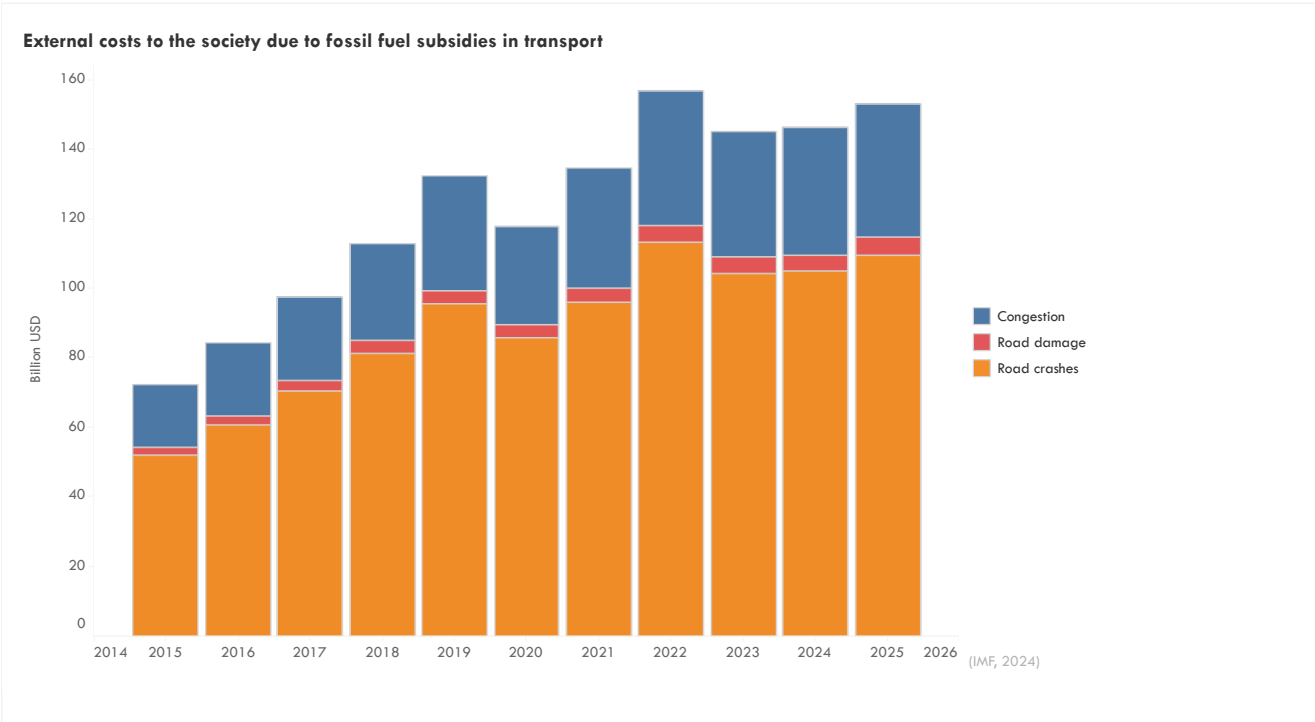


**The country report to WHO indicates that women made up 32% of total road crashes deaths in 2021**

The economic burden of road crashes in People's Republic of China is substantial. In 2021, fatalities and serious injuries cost an estimated 928 Billion USD, equivalent to roughly 5% of the country's GDP. This figure is on par with the healthcare expenditure as a proportion of GDP, underscoring the significant strain on resources.

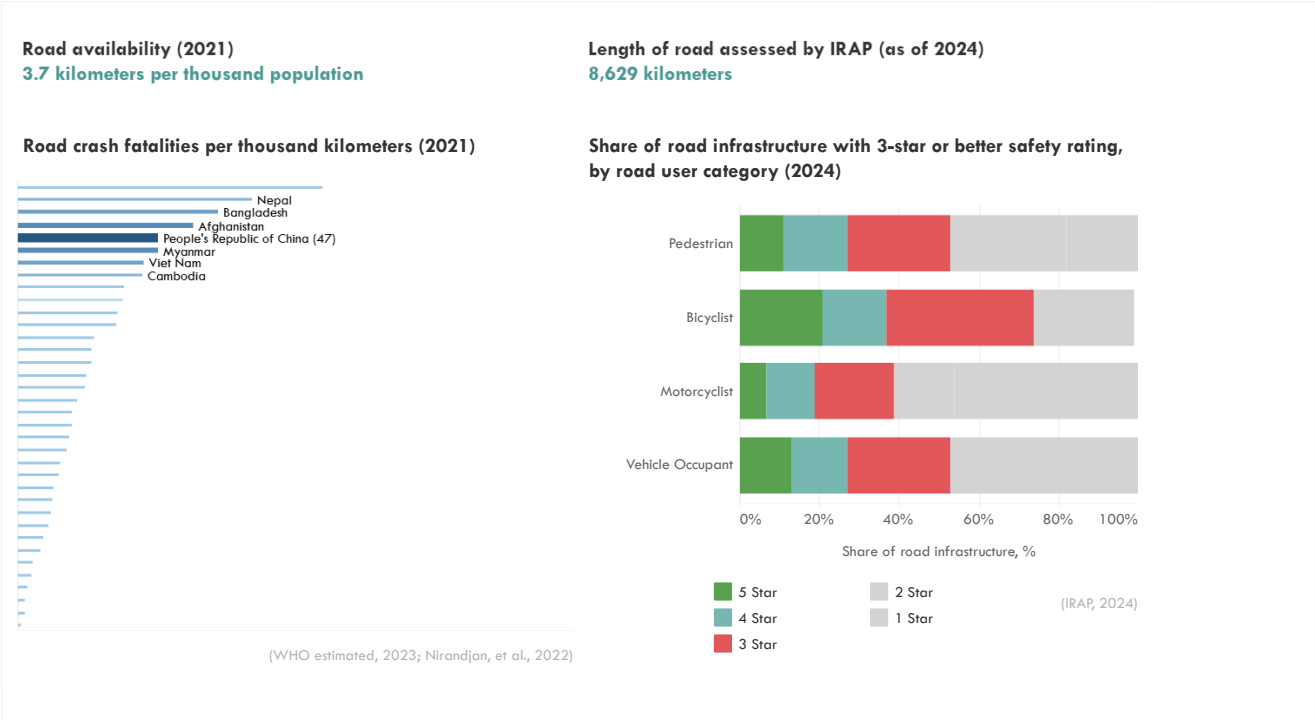


Furthermore, road crashes contribute significantly to the implicit costs of fossil fuel subsidies in transport (about 72%). Investing in road safety improvements, such as those proposed by iRAP, could yield substantial economic benefits by preventing fatalities and reducing long-term costs.



The International Road Assessment Programme (iRAP) provides star ratings for road infrastructure based on the level of safety offered to different road user groups. In People's Republic of China, as of 2024, 53% of road infrastructure had a 3-star or better rating for pedestrians, and 75% had the same rating for bicyclists. While these figures are higher than the Asia-Pacific averages, they indicate that there is still significant room for improvement in road infrastructure

safety, especially for vulnerable road users.

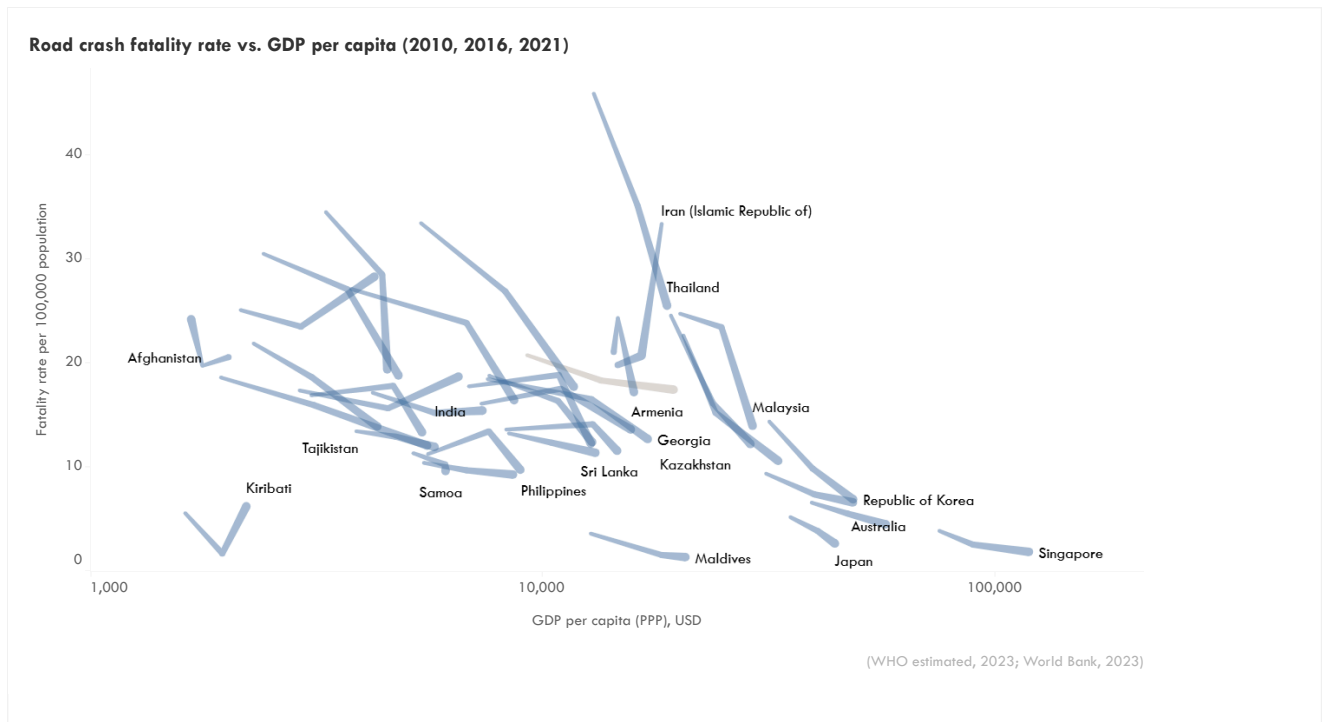


People's Republic of China has experienced rapid motorization, with 218 vehicles per thousand population in 2022. The vehicle fleet comprises a mix of vehicle types. This increasing motorization necessitates proactive road safety measures to mitigate the associated risks.

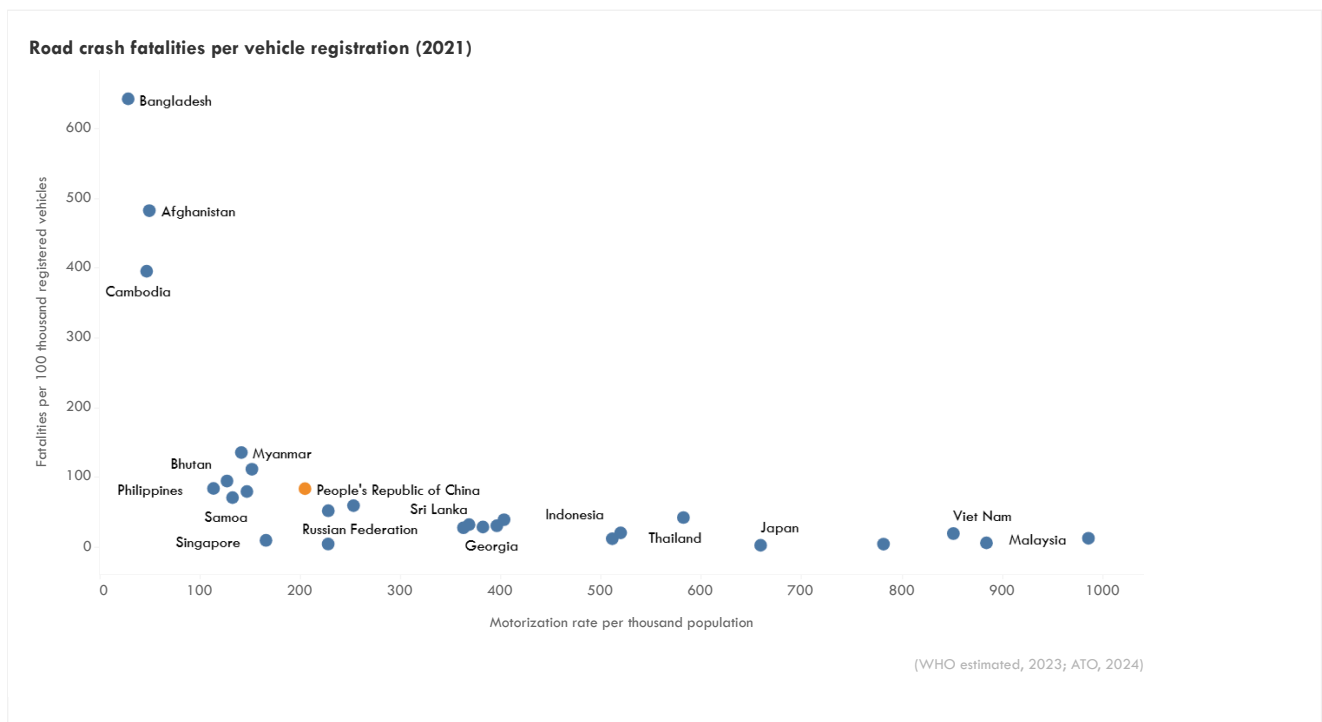


Benchmarking

Benchmarking People's Republic of China's road safety performance against regional averages provides context and identifies areas for improvement. While People's Republic of China has made progress in reducing fatalities per capita, it still lags slightly behind regional averages. The fatality rate stood at 17.4 per 100,000 population in 2021. This marks a -16% decrease from 20.7 in 2010, indicating positive progress. However, the rate still lags slightly behind the Asia-Pacific average of 15.2 and the East Asia average of 15.6 for the same year.

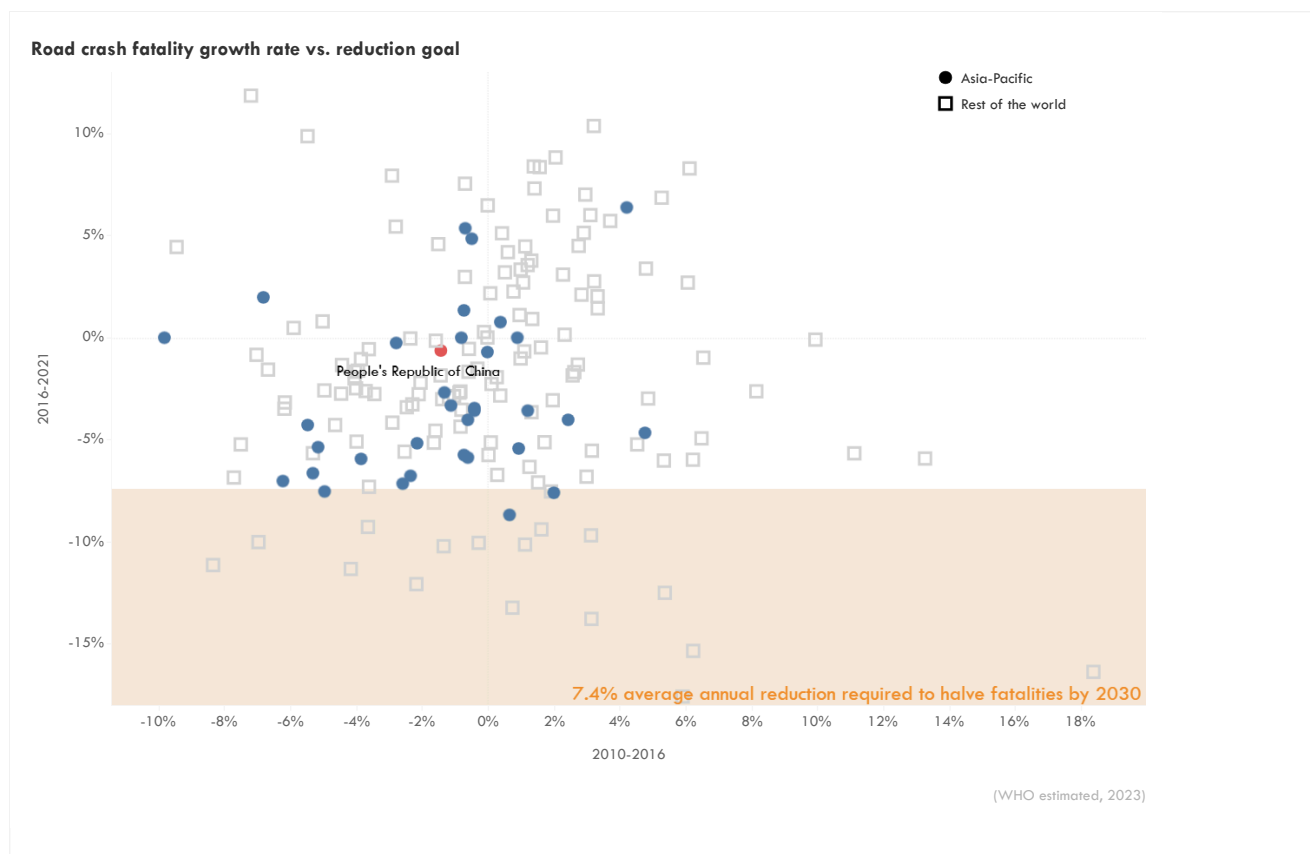


People's Republic of China had about 85 fatalities per 100 thousand registered vehicles.



## Can Asia meet the 2030 target of halving fatalities?

- **Urgent action needed to reduce road fatalities** The Decade of Action for Road Safety 2021-2030 aims to cut road fatalities in half by 2030. An annual reduction of at least 7.4% is necessary to achieve this.
- **Asia-Pacific region falling behind** Despite reaching a peak in road crash fatalities, the Asia-Pacific region is not on track to meet the 2030 goal. The average annual reduction in deaths between 2016 and 2021 was only 0.6%, far below the required rate.
- **Varying progress across Asia** Using the 2016-2021 road crash fatality growth rate as a basis for estimates until 2030:
  - Only 3 Asian countries are projected to achieve the 50% reduction target by 2030.
  - 18 Asian countries are expected to reduce fatalities by at least 25%.
  - Worryingly, 7 Asian countries will continue to increase road fatalities, moving further away from the target.
- In People's Republic of China, road crash fatalities decreased by approximately -1% per year between 2016 and 2021. However, this is not enough to reach the 2030 target to halve the fatalities by 2030



## Policy Landscape

China has established clear road safety targets under multiple 14th Five-Year Plans (2021–2022), including annual reductions in traffic accident mortality, fatalities per 10,000 vehicles, and the number of major accidents through 2025. Alongside these, the country has adopted a wide set of complementary measures with indirect road safety benefits—ranging from seatbelt and helmet use targets to intelligent transport systems, vehicle fleet renewal, rural road safety upgrades, and public transport expansion.

Targets to reduce road crash fatalities or injuries	Target year	Document	Year published
Road traffic accident mortality rate per 10,000 vehicles: During the 14th Five-Year Plan period, decrease by around 3% annually compared to the end of the 13th Five-Year Plan period.	2025	"14th Five-Year" National Road Traffic Safety Plan	2022
The fatalities per 10,000 vehicles in major and above road transport accidents will decrease by 20%.	2025	14th Five Year Development Plan for Highways	2021
Number of major road traffic accidents: During the 14th Five-Year Plan period, decrease by around 4% annually compared to the end of the 13th Five-Year Plan period.	2025	"14th Five-Year" National Road Traffic Safety Plan	2022
Number of serious and particularly serious road traffic accidents: Controlled at around 4 cases per year during the 14th Five-Year Plan period.	2025	"14th Five-Year" National Road Traffic Safety Plan	2022
The death toll per 10,000 vehicles in road transport accidents of major and above levels will decrease by 12%. (12% in 2020)	2025	"14th Five-Year" National Road Traffic Safety Plan	2022
The reduction rate in the number of deaths per 10,000 vehicles in major and above-level road traffic accidents: 12%.	2025	"14th Five-Year" National Road Traffic Safety Plan	2022

Measure type	Other targets with indirect benefits to road safety	Target year	Document	Year published
General parking measures	By 2025, no less than 1,200 standardized "Drivers' Homes" will be built and put into stable operation, and gas stations that meet the conditions will be promoted to build "Drivers' Homes", gradually building a "Drivers' Home" service network system with a reasonable layout, networked connections, complete services, convenient and affordable services.	2025	"14th Five-Year Plan" Development Plan for Comprehensive Transportation Services	2022
General public transport	Carry out green travel actions in depth and maintain the number of cities with over 1 million permanent urban residents and a green travel rate above 70% at no less than 60.	2027	Five-Year Action Plan to Accelerate the Construction of a Strong Transportation Nation (2023-2027)	2023
Bus fleet renewal	The proportion of new energy urban buses: 72%	2025	14th Five-Year Plan Modern Comprehensive Transportation System Development Plan	2022
Helmet law applies to motorcycle drivers and adult passengers	Helmet-wearing rate of electric bicycle and motorcycle riders: By 2025, the helmet-wearing rate for motorcycle passengers reaches 90%, and for electric bicycle riders reaches 80%	2025	"14th Five-Year" National Road Traffic Safety Plan	2022
Intelligent transport systems (ITS)	By 2025, the rate of new car assembly of DA, PA, and CA will reach 80%, of which the rate of new cars assembly of PA and CA will reach 25%, and highly and fully autonomous driving cars will begin to enter the market.	2025	Mid- to Long-term Development Plan for the Automotive Industry	2017
Intelligent transport systems (ITS)	By 2025, the technological innovation, industrial ecology, infrastructure, regulatory standards, product supervision and cybersecurity system of China's standard intelligent vehicles will be basically formed. Intelligent vehicles with conditional autonomous driving will be mass-produced, and highly autonomous intelligent vehicles will be commercialized in specific environments. By 2025, positive progress has been made in the construction of intelligent transportation systems and smart city-related facilities. Vehicle wireless communication networks (LTE-V2X, etc.) have achieved regional coverage. The new generation of vehicle wireless communication networks (5G-V2X) have been gradually applied in some cities and highways, and the high-precision space-time reference service network has achieved full coverage.	2025	Intellegent Automobile innovation and development strategy	2020
Intelligent transport systems (ITS)	2035 to 2050, China's standard intelligent vehicle system will be fully established and more complete.	2050	Intellegent Automobile innovation and development strategy	2020
Seatbelt law applies to drivers and front seat passengers	Seatbelt-wearing rate in automobiles: Reach 95% in front seats and 70% in rear seats by 2025.	2025	"14th Five-Year" National Road Traffic Safety Plan	2022
Seatbelt law applies to rear seat passengers	Seatbelt-wearing rate in automobiles: Reach 95% in front seats and 70% in rear seats by 2025.	2025	"14th Five-Year" National Road Traffic Safety Plan	2022
Technical standards for road infrastructure	Stabilize the rate of excellent and medium roads of rural roads at more than 85%, and greatly improve the safety guarantee capacity of rural roads.	2027	Five-Year Action Plan to Accelerate the Construction of a Strong Transportation Nation (2023-2027)	2023

Upgrading high risk locations for road safety	Accelerate the implementation of projects such as the renovation of dangerous and old bridges (including the construction of structural health monitoring systems for long bridges), the refinement of safety facilities, and disaster prevention and control. The treatment rate of newly discovered Class IV and Class V bridges on national and provincial trunk roads reached 100%, and no less than 1,000 kilometers of trunk road disaster prevention and control were completed each year.	2027	Five-Year Action Plan to Accelerate the Construction of a Strong Transportation Nation (2023-2027)	2023
Vehicle scrappage scheme	The level of energy conservation and environmental protection and the recycling rate of automobiles have been continuously improved, the automobile recycling rate will reach 95% by 2020. By 2025, the actual recycling rate of automobiles will reach the international advanced level.	2025	Mid- to Long-term Development Plan for the Automotive Industry	2017
Vehicle scrappage scheme	The volume of scrapped cars recycled will approximately double that of 2023, and the volume of used car transactions will increase by 45% compared to 2023.	2027	Action plan to promote large-scale equipment renewals and consumer product trade-ins	2024



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