SINGAPORE

ROAD SAFETY PROFILE

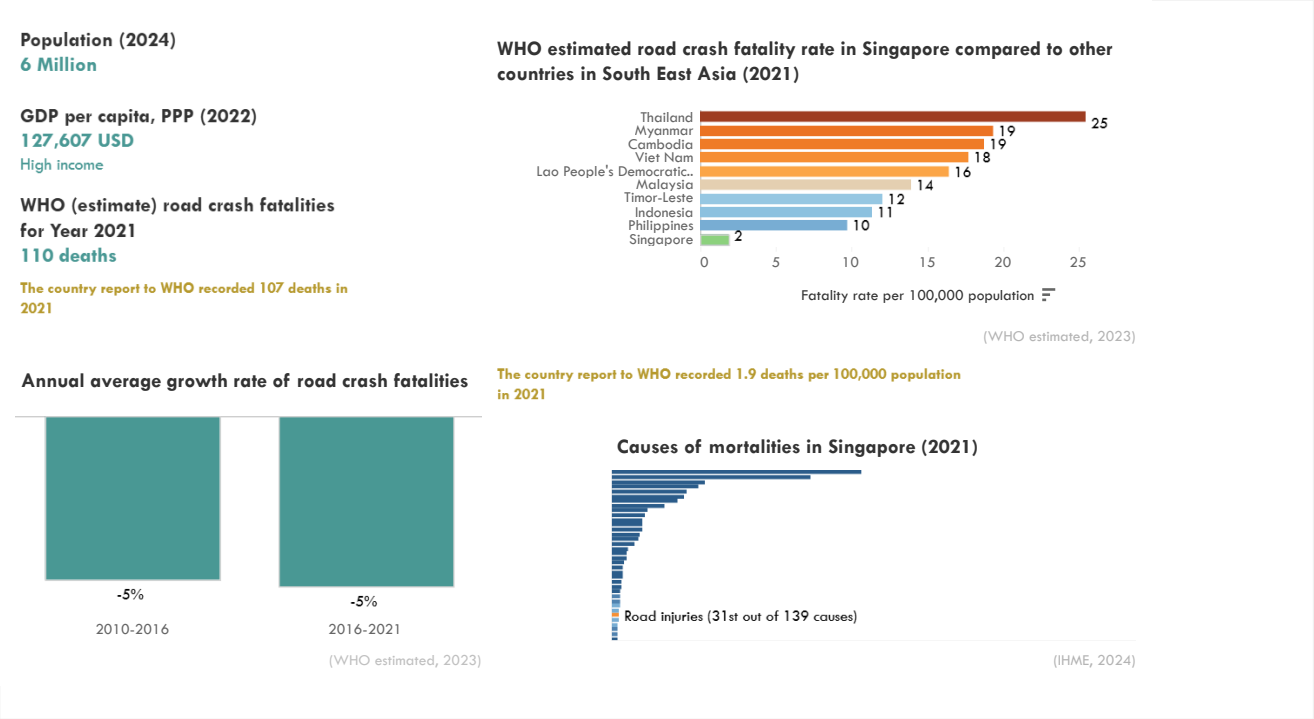
Supported by:

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

Singapore, a highly urbanized and developed nation, has made significant strides in road safety. In 2021, Singapore witnessed approximately 100 road crash fatalities, accounting for 0.5% of all deaths in the country (estimate by WHO). While the country boasts a relatively low road fatality rate compared to regional averages, continuous efforts are crucial to improve road safety and achieve ambitious targets. This narrative explores Singapore's current state of road safety, examining data, costs, trends, and the policy landscape.



No significant discrepancy exists between reported road crash fatalities in Singapore and WHO estimates.

Road crash fatality rate, by source

WHO (estimate) for Year 2021
1.9 per 100,000 population

WHO (country-report) for Year 2021
1.9 per 100,000 population

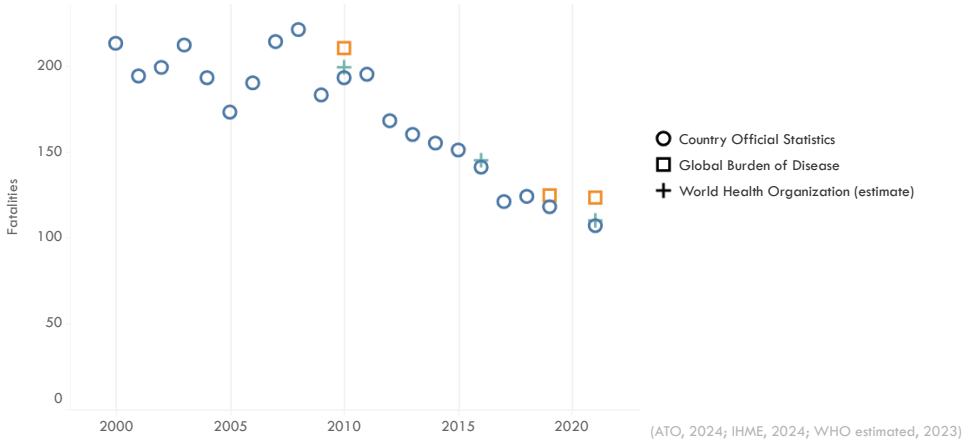
Country official statistics for Year 2023
2.3 per 100,000 population

GBD estimate for Year 2021
2.1 per 100,000 population

Every 19 hours, someone dies in a road crash in Singapore

(WHO estimated, 2023)

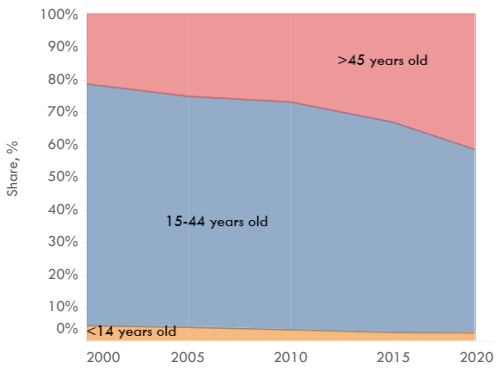
Road crash fatalities, by source



(ATO, 2024; IHME, 2024; WHO estimated, 2023)

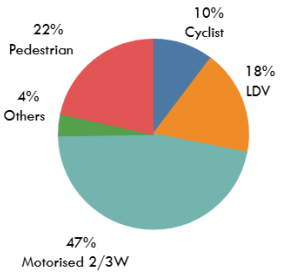
Disaggregated data provides a deeper understanding of road safety challenges. The share of female fatalities increased slightly from 19% to 21% during this period while remaining at 23% across the Asia-Pacific region. The combined share of fatalities among minors (<14 years) and seniors (>65 years) in Singapore rose from 35% to 43% between 2015 and 2019. In 2021, pedestrians and bicyclists constituted 32% of total road fatalities in Singapore, comparable to the Asia-Pacific average of 31%. This data highlights the need for targeted interventions to protect vulnerable road users.

Road crash fatalities, share by age group



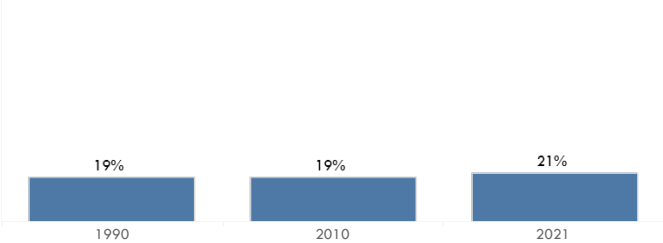
(IHME, 2021)

Road crash fatalities, share by road user



(Country report to WHO, 2023)

Share of female road crash fatalities



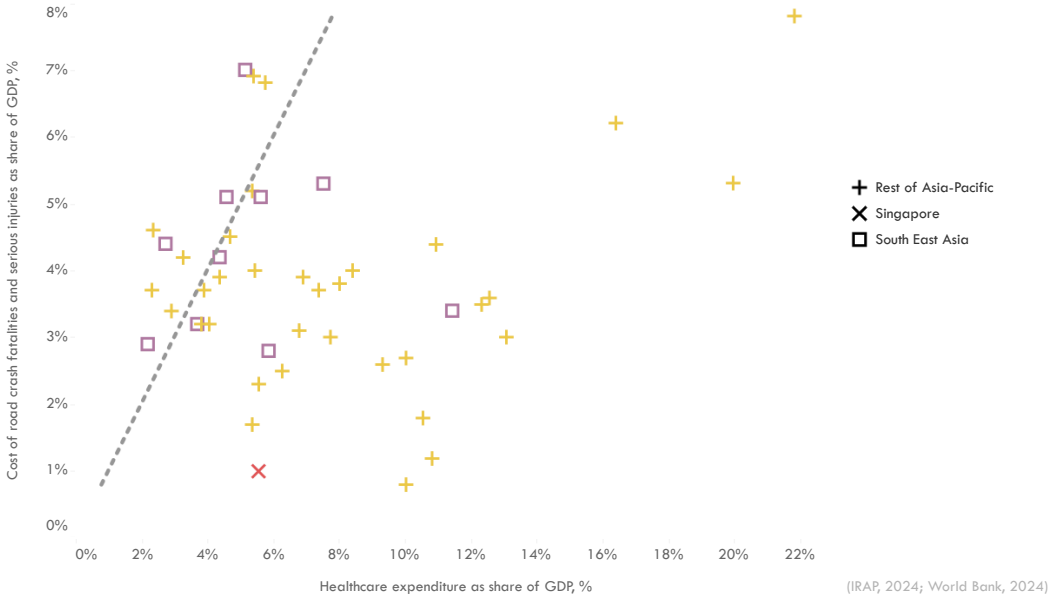
The country report to WHO indicates that women made up 16% of total road crashes deaths in 2021

(IHME, 2024)

Road crashes impose a substantial economic burden on Singapore. In 2021, the estimated cost of fatalities and serious injuries reached approximately 4 billion USD, equivalent to roughly 1% of Singapore's GDP.

Cost of road crash fatalities and serious injuries (2021)
4.4 Billion USD

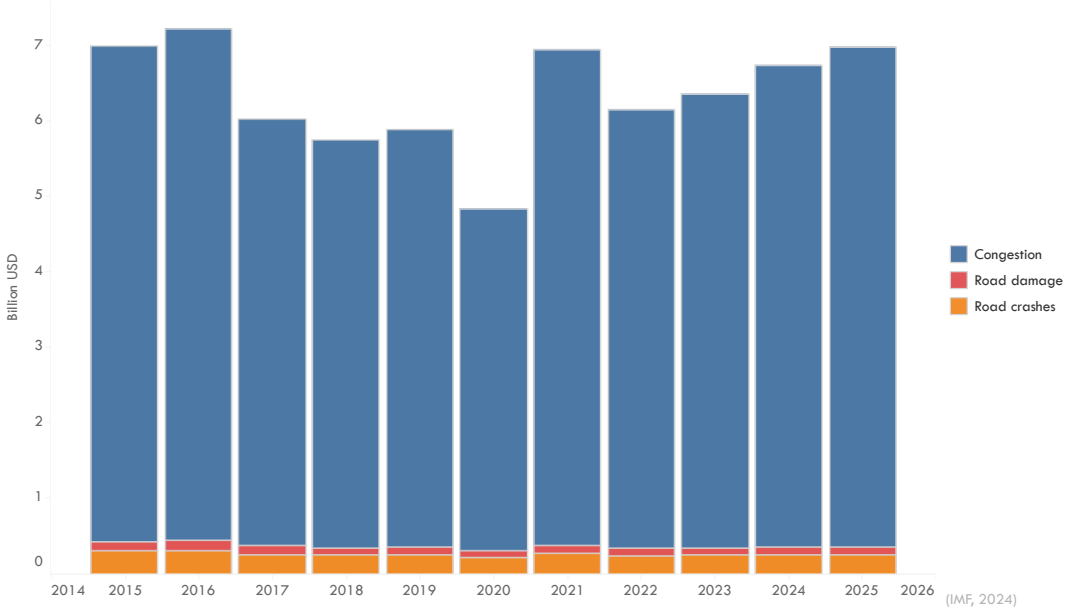
Cost of road crash fatalities and serious injuries vs. country healthcare expenditure as share of GDP (2021)



(IRAP, 2024; World Bank, 2024)

Road crashes also account for about 4% of the implicit costs associated with fossil fuel subsidies in transport. The International Road Assessment Programme (iRAP) suggests that an annual investment of 20 million USD (approximately 0.0% of Singapore's GDP) could potentially prevent significant fatalities annually.

External costs to the society due to fossil fuel subsidies in transport

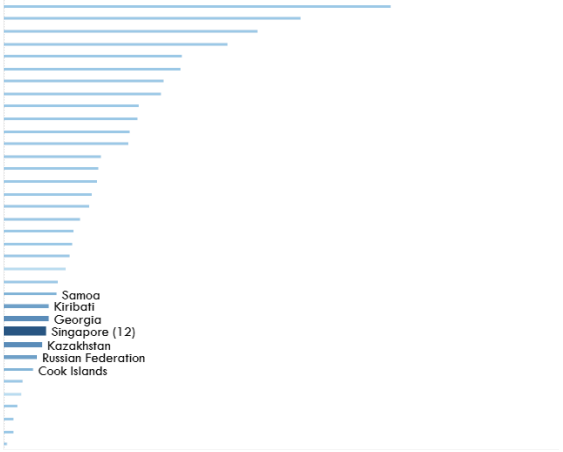


(IMF, 2024)

Singapore had about 12 fatalities per thousand kilometers of road. Data regarding infrastructure ratings in Singapore is limited, hindering a comprehensive assessment of road conditions.

Road availability (2021)
1.6 kilometers per thousand population

Road crash fatalities per thousand kilometers (2021)



(WHO estimated, 2023; Nirandjan, et al., 2022)

Share of road infrastructure with 3-star or better safety rating, by road user category (2024)

(IRAP, 2024)

Singapore has a high level of motorization. By 2023, there were 166 vehicles per thousand population. This high density of vehicles necessitates effective traffic management and road safety measures. In 2021, Singapore had about 11 fatalities per 100 thousand registered vehicles. By 2023, there were 165.7 vehicles per thousand population in Singapore, comprised of 14% two-wheelers, 67% light-duty vehicles (LDVs), 2% buses, 17% trucks, and less than 1% other vehicle types.

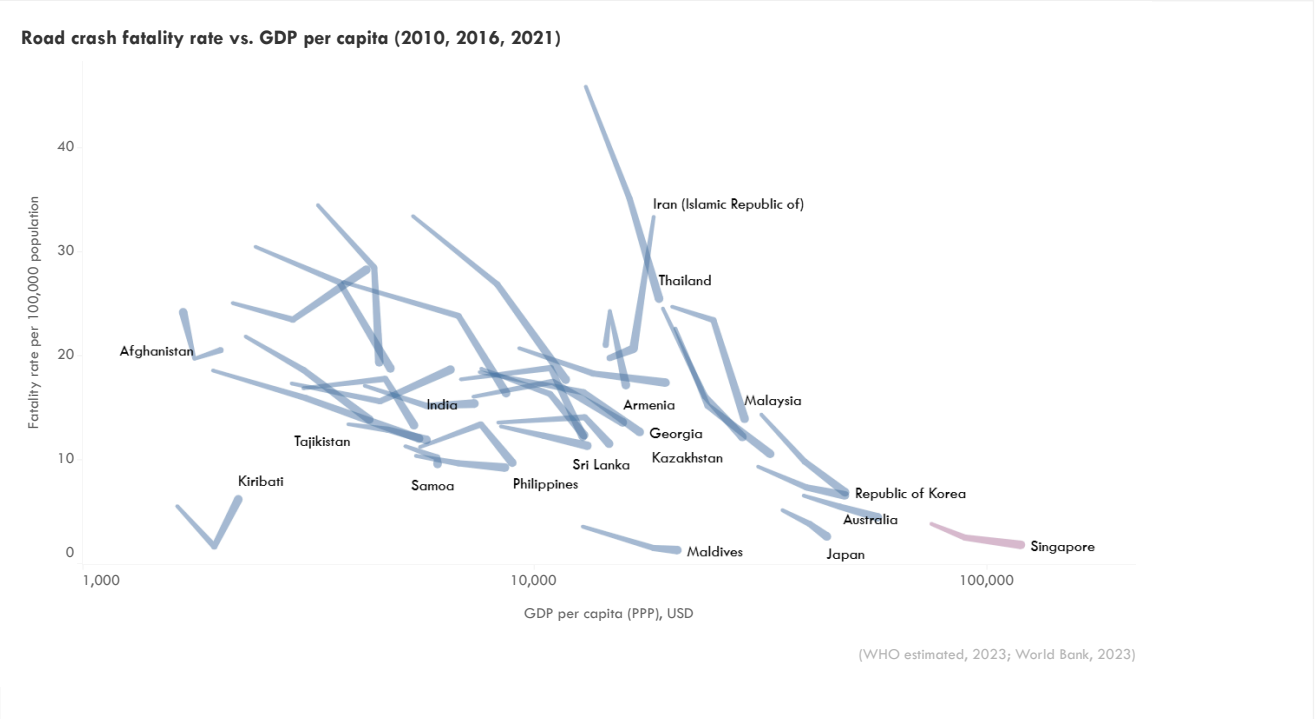
Motorization rate (2023)
166 vehicles per thousand population

Vehicle share by type (2022)

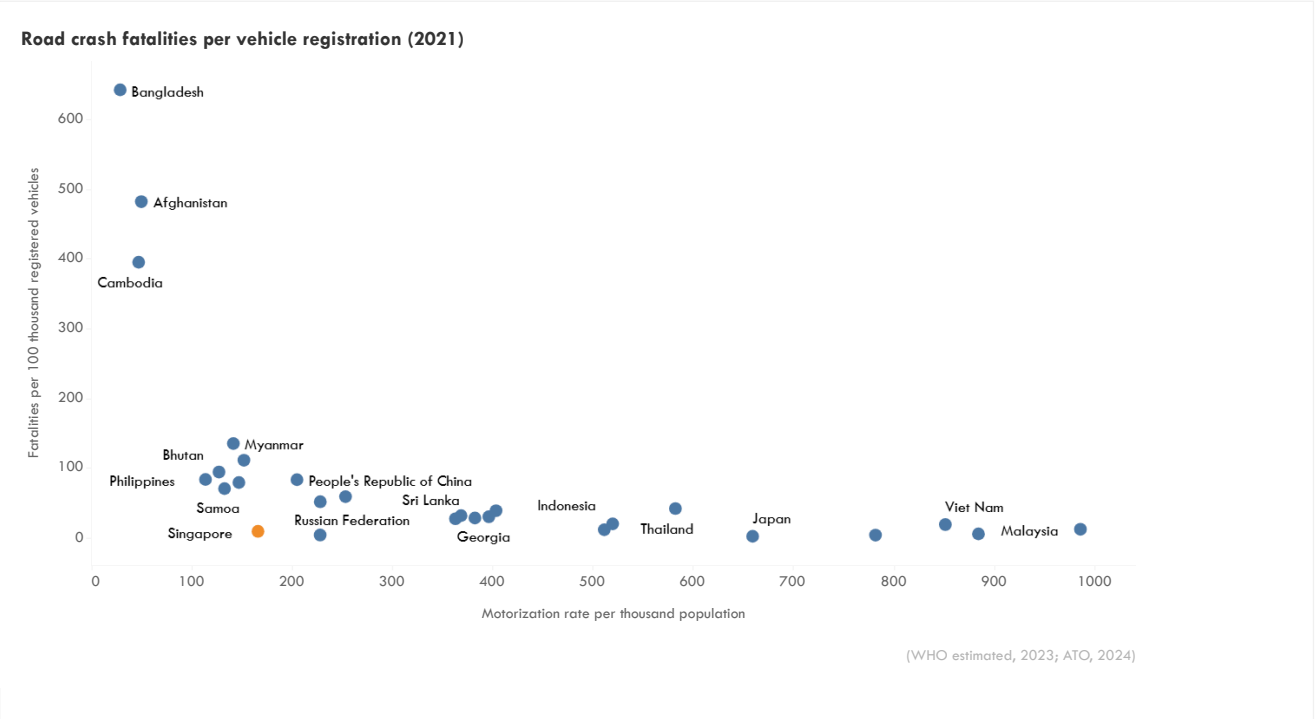
(ATO, 2024)

Benchmarking

While Singapore's road safety record is commendable, benchmarking against leading countries and regions is essential to identify areas for further improvement. Comparing Singapore's data with regional and global averages helps to understand its relative performance and learn from best practices. Singapore's road traffic crash fatality rate 2021 was 1.9 per 100,000 population, significantly lower than the Asia-Pacific average of 15.2 and the South East Asia average of 14.4. Between 2010 and 2021, Singapore witnessed a remarkable 52% decrease in this rate, compared to a 19% improvement in the Asia-Pacific region and a 35% decrease in South East Asia.

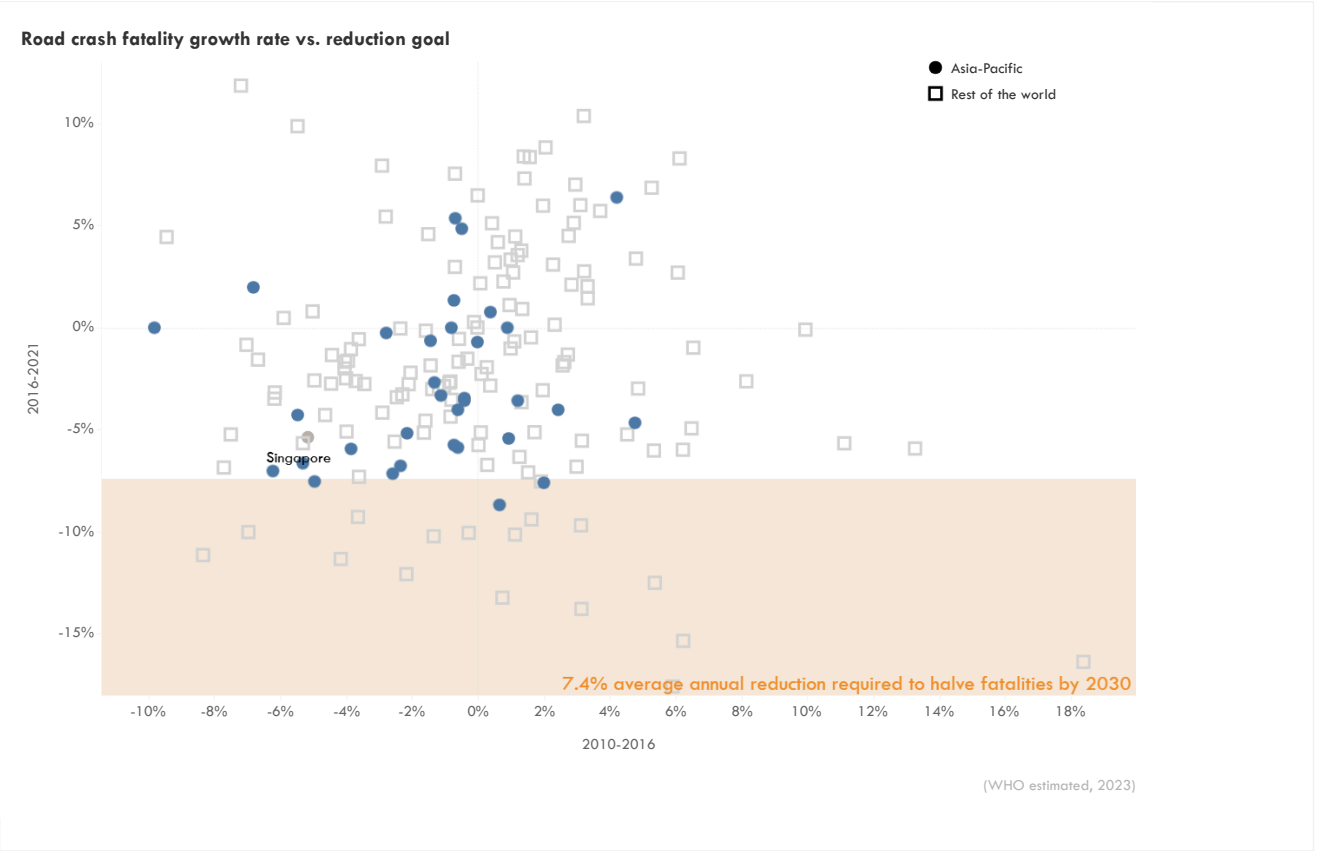


Singapore had about 11 fatalities per 100 thousand registered vehicles.



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 Singapore, road crash fatalities decreased by approximately -5.4% per year between 2016 and 2021. However, this is not enough to reach the 2030 target to halve the fatalities by 2030



Policy Landscape

Singapore has no explicit road safety targets. However, Singapore has made considerable strides in road safety. Singapore has set various targets contributing to road safety, including expanding active transport infrastructure, improving travel time, enhancing general transport for elderly individuals, children, and persons with disabilities, renewing the bus fleet, integrating public transit, shifting travel modes, and implementing a vehicle scrappage scheme. Key policy documents with indirect road safety benefits include the Land Transport Master Plan 2040, the Sustainable Singapore Blueprint 2015, the Road Traffic Act 1961, and Singapore's Long-Term Low-Emissions Development Strategy. A comprehensive national road safety strategy with clear targets and dedicated funding would further enhance Singapore's efforts.

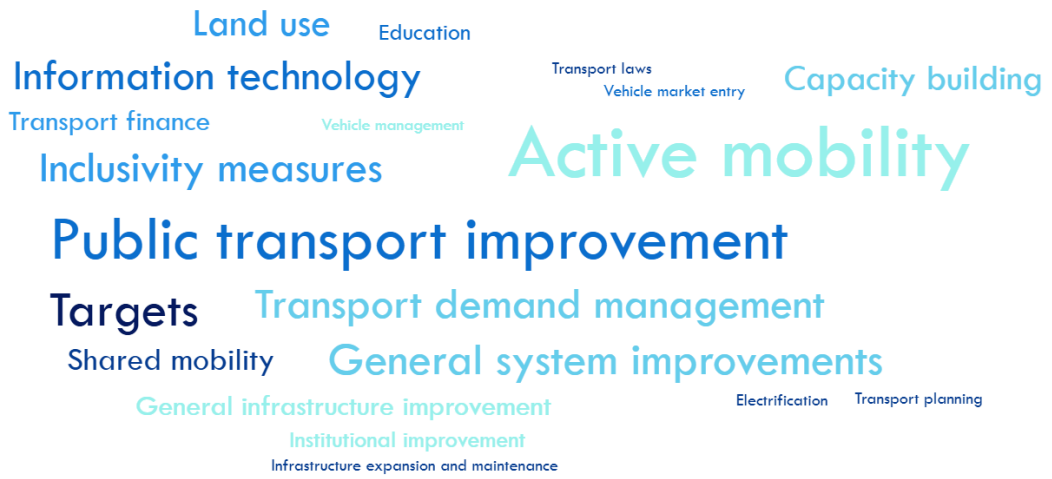
Targets to reduce road crash fatalities or injuries	Target year	Document	Year published
No data			

Measure type	Other targets with indirect benefits to road safety	Target year	Document	Year published
Active transport infrastructure expansion	We continue to promote active mobility, and are expanding our cycling network to around 1,300km by 2030.	2030	Voluntary National Reviews 2023	2023
Active transport infrastructure expansion	Since 2011, LTA has built 5,000 new bicycle lots at MRT stations, with another 700 slated for completion by end 2014	2030	Sustainable Singapore Blueprint 2015	2014
Active transport infrastructure expansion	Over 700 km of cycling paths, together with enhanced cycling infrastructure and code of conduct for safer cycling	2030	Sustainable Singapore Blueprint 2015	2014
Active transport infrastructure expansion	More than 200 km of sheltered walkways to transport nodes	2030	Sustainable Singapore Blueprint 2015	2014
Active transport infrastructure expansion	To facilitate walking and cycling, our sheltered walkway network will be quadrupled from the existing 56km to 200km by 2018. Cycling paths will double from 355km in 2015 to more than 700km by 2030.	2030	Climate Action Plan	2016

Active transport infrastructure expansion	Beyond the 200 km of sheltered walkways from transport nodes to homes and public amenities built as of now, a further 150 km of these sheltered walkways will be added by 2040.	2040	Singapore's Fifth National Communication and Fifth Biennial Update Report	2022
Active transport infrastructure expansion	Singapore will accelerate the building of cycling paths and active mobility infrastructure to make cycling and walking more convenient and attractive. By 2030, our cycling path network will be extended to more than 1,000 km, up from 460 km in 2020.	2030	Singapore's Fifth National Communication and Fifth Biennial Update Report	2022
Active transport infrastructure expansion	A further 150km of these covered linkways will be added by 2040.	2040	Singapore's Long-Term Low-Emissions Development Strategy	2020
Active transport infrastructure expansion	By 2040, our cycling path network will be extended to more than 1,000km from 440km in 2019.	2040	Singapore's Long-Term Low-Emissions Development Strategy	2020
Active transport infrastructure expansion	By 2020, Singaporeans will have 267,000 bicycle parking spaces, with more to come by 2040.	2040	Land Transport Master Plan 2040	2019
Active transport infrastructure expansion	Looking ahead, we will continue to expand the cycling path network to more than 1,000km by 2040	2040	Land Transport Master Plan 2040	2019
Travel time improvement	This will bring us towards our aim of increasing peak-period public transport journeys completed by Walk-Cycle-Ride modes under 45 minutes from 70% today to 90% by 2040.	2040	Voluntary National Reviews 2023	2023
Travel time improvement	8 in 10 households within 10-min walk of a train station	2030	Sustainable Singapore Blueprint 2015	2014
Travel time improvement	9 in 10 homes to be within 10-min walk of a park	2030	Sustainable Singapore Blueprint 2015	2014
Travel time improvement	We are making good progress towards achieving our goal of bringing 8 in 10 households within a 10-minute walk of a train station by the 2030s	2030	Singapore Green Plan	2021
Travel time improvement	By 2040, all journeys to the nearest neighbourhood centre using WCR modes of transport will take no more than 20 minutes, while nine in 10 peak period WCR journeys will be completed in less than 45 minutes.	2040	Singapore's Fifth National Communication and Fifth Biennial Update Report	2022
General transport improvement for elderly, children, or persons with disabilities	We will also give seniors and persons with disabilities more time to cross the road. We have introduced the Green Man Plus scheme at about 1,000 pedestrian crossings and will extend this to another 1,500 pedestrian crossings in housing estates by 2026	2026	Land Transport Master Plan 2040	2019
General transport improvement for elderly, children, or persons with disabilities	However, we should and will do more to improve barrier-free accessibility, so that more journeys by walking, cycling and riding public transport are barrier-free by 2040.	2040	Land Transport Master Plan 2040	2019
Bus fleet renewal	We have started by deploying 60 electric buses and will replace 400 diesel buses with electric buses by 2025. With these 60 electric buses, the CO2 tailpipe emissions from buses will decrease by approximately 7,840 tons annually.	2025	EV Policy	2022
Public transit integration	More than 200 km of sheltered walkways to transport nodes	2030	Sustainable Singapore Blueprint 2015	2014

General public transport	80 new bus services and 1,000 more buses	2030	Sustainable Singapore Blueprint 2015	2014
General public transport	Our taxi fleet operators have also set targets to electrify their fleet, by committing at least half of the total taxi fleet to go electric by 2030.	2030	EV Policy	2022
General public transport	By 2040, our entire bus and taxi fleet will use cleaner energy, contributing to a clean environment.	2040	Land Transport Master Plan 2040	2019
Target - Modal shift	We aim to increase the public transport mode share during peak periods from 64% in 2013 to 75% by 2030.	2030	Sustainable Singapore Blueprint 2015	2014
Target - Modal shift	The target is to raise the public transport modal split for the morning peak hours from the current 63% to over 70% in the next 10 to 15 years.	2027	E2 Singapore	2012
Target - Modal shift	By 2050, the aim is to further increase this share to 85 per cent.	2050	Climate Action Plan	2016
Target - Modal shift	Achieve 75 per cent use of public transport by 2030	2030	Climate Action Plan	2016
Target - Modal shift	Achieve more than 80% mass public transport (i.e. rail and bus) peak-period modal share Public, active and shared transport modes to account for 9 in 10 of all peak-period journeys	2040	Singapore Green Plan	2021
Target - Modal shift	Achieve 75% mass public transport (i.e. rail and bus) peak-period modal share	2030	Singapore Green Plan	2021
Target - Modal shift	Public transport is the most energy-efficient mode of powered transport. Singapore's target is for the mass public transport modal share during the morning and evening peak hours to reach 75% by 2030.	2030	Singapore's Fifth National Communication and Fifth Biennial Update Report	2022
Target - Modal shift	9 in 10 peak period journeys on "WalkCycle-Ride" by 2040	2040	Singapore's Long-Term Low-Emissions Development Strategy	2020
Vehicle scrappage scheme	Electric buses to make up half of the public bus fleet by 2030. Existing diesel buses will be replaced with cleaner energy buses by 2040	2040	Singapore Green Plan	2021

Policy measures with indirect benefit to road safety



References

ATO. National Database (2024). **https://asiantransportoutlook.com/snd/**

IMF. (2024). Climate Data. **https://climatedata.imf.org/pages/access-data**

Institute for Health Metrics and Evaluation. (2021). GBD Results. GBD Results. **https://vizhub.healthdata.org/gbd-results**

Institute for Health Metrics and Evaluation. (2024). Global Burden of Disease Study 2021 (GBD 2021) Cause-Specific Mortality 1990-2021. **https://ghdx.healthdata.org/record/ihme-data/gbd-2021-cause-specific-mortality-1990-2021**

iRAP. (2024). Safety Insights Explorer. iRAP. **https://irap.org/safety-insights-explorer/**

Nirandjan, S., Koks, E. E., Ward, P. J., & Aerts, J. C. J. H. (2022). A spatially-explicit harmonized global dataset of critical infrastructure. Scientific Data, 9(1), 150. **https://doi.org/10.1038/s41597-022-01218-4**

United Nations Department of Economic and Social Affairs Population Division. (2022). World Population Prospects 2022. **https://population.un.org/wpp/**

WHO. (2023). Global Status Report on Road Safety 2023. **https://www.who.int/teams/social-determinants-of-health/safety-and-mobility/global-status-report-on-road-safety-2023**

World Bank. (2023). GDP, PPP (current international $). World Bank Open Data. **https://data.worldbank.org/indicator/NY.GDP.MKTP.PP.CD**

World Bank. (2024). Current health expenditure (% of GDP). World Bank Open Data. **https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS**