



ROAD SAFETY ANNUAL REPORT 2019

MOROCCO

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Between 2016 and 2018, the number of reported road deaths decreased by 7.9% in Morocco. Vulnerable road users represented 63% of all road deaths in 2017. The safety of motorcyclists is a growing concern, with an increase in their mortality of more than 160% between 2000 and 2017. In 2018, the government of Morocco announced the creation of the National Road Safety Agency, due to be operational in January 2020. The current road safety strategy covers the period 2017-26. Its main target is to reduce the number of road deaths by 50% between 2015 and 2026.

Trends

Morocco registered an overall **decrease in the number of road deaths in both 2017 and 2018**. According to provisional police data, 3 485 persons lost their lives in traffic crashes in Morocco in 2018. This represents a 6.5% decline on 2017. In 2017, 3 726 road deaths were reported, a 1.6% decrease on 2016. Overall, between 2016 and 2018 the number of road fatalities decreased by 7.9%.

Country Profile

Population in 2018: 35.2 million

GDP per capita in 2018: USD 3 364

Cost of road crashes: 2% of GDP (2017)

Registered motor vehicles in 2016: 3.8 million (cars 71%, goods vehicles 24%, motorcycles 1.5%)

Speed limits: 60 km/h on urban roads; 100 km/h on rural roads; 120 km/h on motorways

Limits on Blood Alcohol Content: 0.2 g/l

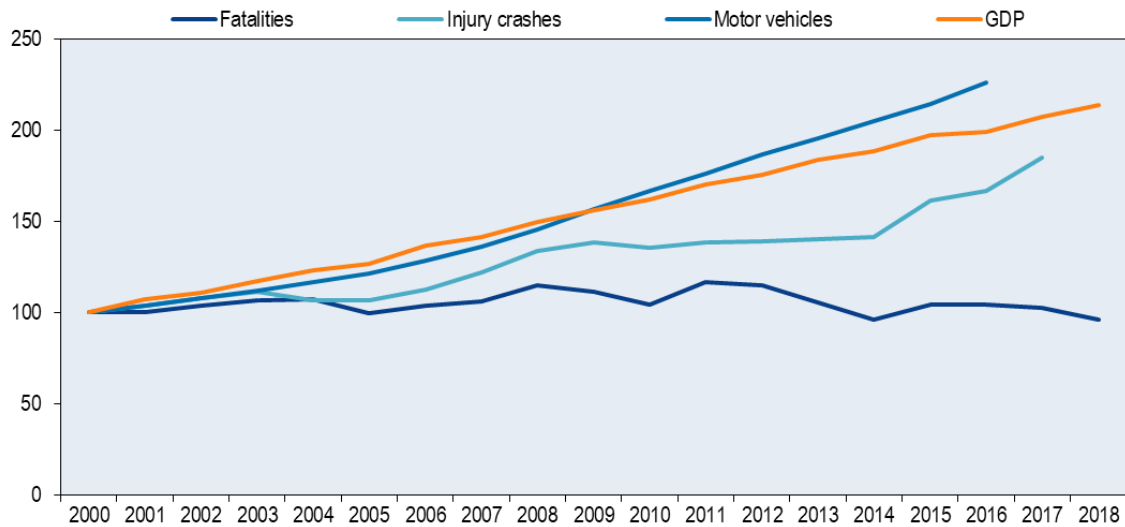
Since 2000, the number of annual road deaths has fluctuated between 3 500 and 4 200 with no clear trends.

The number of reported **traffic deaths per 100 000 inhabitants** in Morocco fell by 22% between 2000 and 2018. In 2018, 9.9 traffic deaths per 100 000 inhabitants were recorded, compared to 12.7 in 2000. By way of comparison, the average in the European Union is 4.9 deaths per 100 000 inhabitants in 2018.

Morocco recorded 10.0 **road fatalities per 10 000 registered vehicles** in 2016. This represents a decrease of 54% compared to the year 2000, when the rate of deaths to registered vehicles stood at 21.7. This important decrease is to be seen in the context of a rapid increase in the number of registered vehicles which more than doubled between 2000 and 2016. However, this rate remains extremely high when compared with other IRTAD countries.

¹ The data in this report, unless otherwise noted, were provided by the National Committee for the Prevention of Traffic Crashes (CNPAC) and have not been validated by IRTAD. Some data could be underreported.

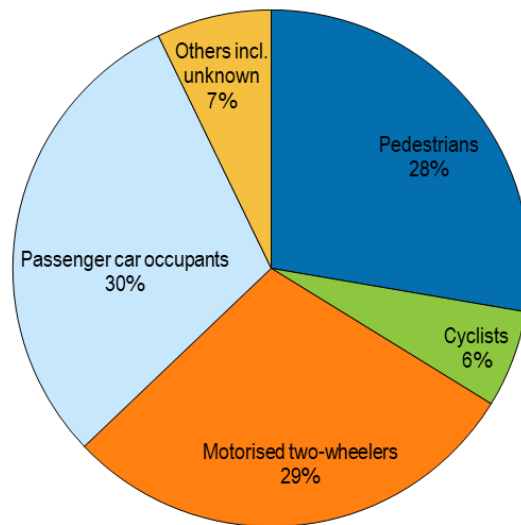
Figure 1. Road safety, vehicle stock and GDP trends
Index 2000 = 100



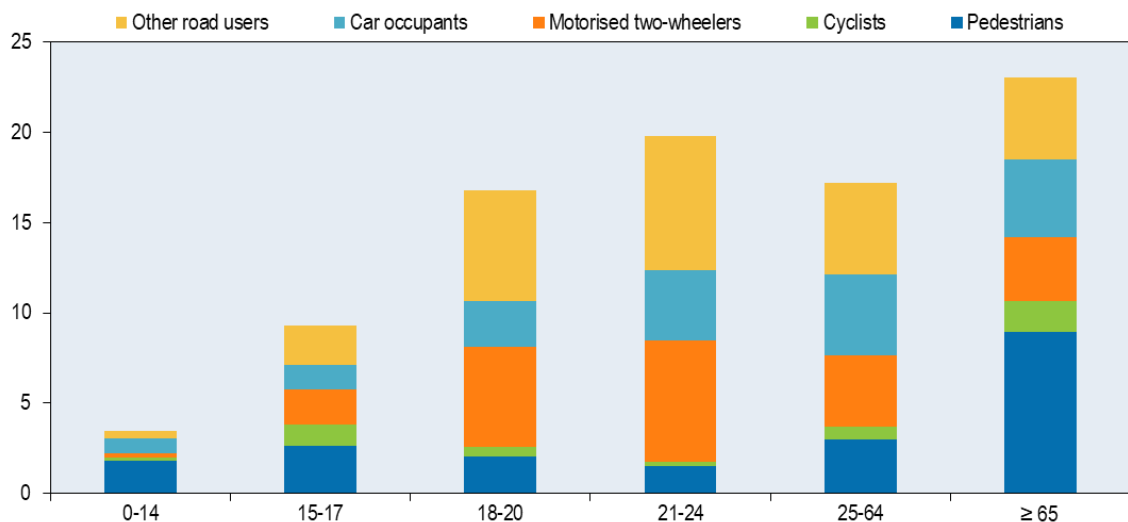
Note: registered vehicles do not include mopeds.

The picture for **fatalities by road user group** is characterised by a predominance of vulnerable road users among road casualties. In 2017, they represented 63% of all road deaths (29% motorcyclists, 28% pedestrians and 6% cyclists). Car occupants accounted for 30% of road deaths. The 162% increase in the number of motorcyclists killed between 2000 and 2017 is a serious concern. It is linked to the very sharp increase of motorcycles in the motor vehicle fleet, combined with a low rate of helmet use. During the same period, the number of road deaths among car occupants also increased sharply, by 61%. Based on reported data, the number of pedestrians killed decreased by 9% between 2000 and 2017.

In 2017, in a context of a stagnation in the number of road deaths (-1.6%), there was no marked change for any road user group.

Figure 2. Road fatalities by road user group in percentage of total, 2017

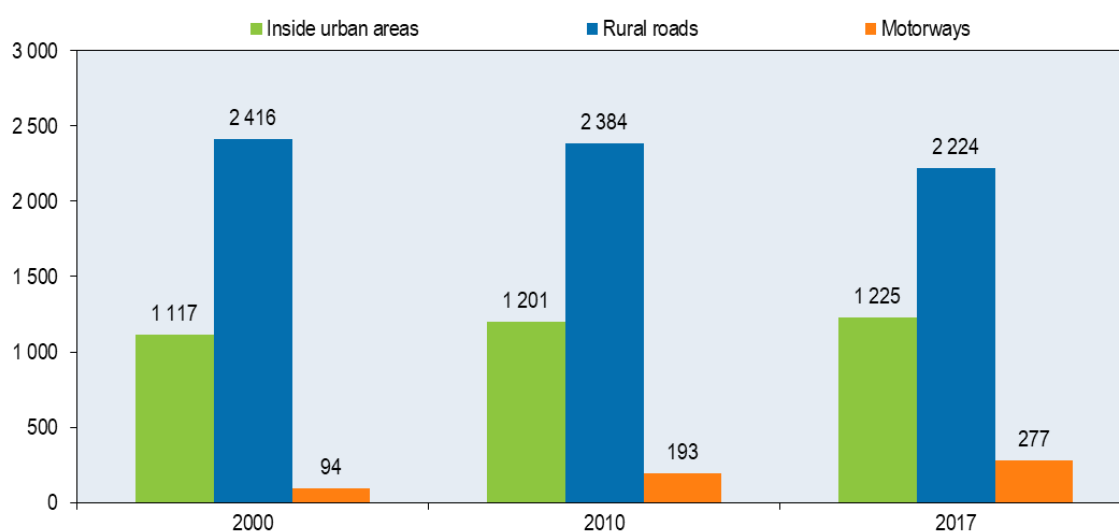
Road deaths by age group shows that the elderly population aged 65 and above is by far the population most at risk in traffic with a mortality rate of nearly 20 deaths per 100 000 population, i.e. twice the rate of the general population. In 2017 people under 14 saw 41 fewer road deaths (-11.9%) than in 2016. Road deaths decreased also for 15-17 year olds (8 fewer deaths, -5.6%), 25-64 year olds (22 fewer deaths, -1%) and 21-24 year olds (2 fewer deaths, -0.6%). In 2017 compared to 2016, road deaths increased for the 65-74 year olds (19 more deaths, 7.6%), people over 75 (7 more deaths, 4%) and 18-20 year olds (7 more deaths, 3.6%).

Figure 3. Road fatality rate by age and road user group, 2017
Fatalities per 100 000 population in a given age group

Analysis of **fatalities by road type** shows that the rural network is the deadliest. In 2017, 60% of fatalities occurred on rural roads, 33% on urban roads and 7% on

motorways. Since 2010, road safety has improved only on the rural network, with a reduction of nearly 7% in road deaths. The situation deteriorated on other roads, however. The number of road deaths increased by 44% on motorways and by 2% on urban roads. Regarding the motorway network, the increase is to be analysed in light of the expansion of the network. In 1990, the total length of motorways was less than 100 km and accounted for 2% of fatalities. In 2017, the total length of motorways amounted to 1 751 km and accounted for 7% of fatalities.

Figure 4. Road fatalities by road type



Economic costs of road crashes

Traffic crashes represent a significant cost for Moroccan society. In 2017, crashes were estimated to cost EUR 2 billion. Based on estimates from the World Bank, crashes account for 2% of Morocco's GDP.

Behaviour

The behaviour of road users is an important determinant of a country's road safety performance. **Inappropriate speed** in particular is one of the main causes of road crashes. In Morocco, about 8% of all road fatalities in 2017 were caused by speeding.

The table below summarises the main speed limits in Morocco.

Table 1. Passenger car speed limits by road type, 2019

	General speed limit
Urban roads	60 km/h
Rural roads	100 km/h
Motorways	120 km/h

In 2010, Morocco enacted a law prohibiting **driving under the influence of alcohol**. The law fixed the maximum permissible blood alcohol content (BAC) at 0.2 g/l when measured by blood sample and 0.1 mg/l when measured by breath testing. In 2017, on the basis of police data, alcohol use was cited as a contributing factor in 2% of all crashes.

According to the Highway Code, it is forbidden to drive under the **influence of illicit drugs**.

An increasing problem for traffic safety in Morocco is **distraction**, for instance through the use of mobile phones while driving. The use of hand-held phones while driving is forbidden. The use of hands-free devices while driving is authorised. A survey conducted in 2017 among 3 031 car drivers, revealed that 75% of drivers admitted having used a mobile phone while driving in the last twelve months.

The share of **sleepiness and fatigue** as a causal factor in crashes is especially challenging to detect. In 2017, on the basis of police data, it was estimated that about 1.5% of crashes were due to sleepiness and fatigue.

Seat belt use has been compulsory for front seats in rural areas since 1977, and since 2005 for front seats in urban areas and rear seats in rural areas. There is a law prohibiting children under the age of 10 from sitting in the front seat, but there is no law concerning the compulsory use of a child restraint system. According to an observational study conducted in September 2017, the wearing rate in urban areas was 60% for drivers and 57% for front seat passengers. In rural areas, the wearing rate was 72% for drivers, 65% for front seat passengers and 35% for rear seat passengers. Despite recent progress, these use rates are too low. Many lives could be saved if the seat belt wearing rate was closer to the average in IRTAD countries.

Table 2. Seat belt and helmet wearing rates
Percentages

	2017
Front seats	
Urban roads (driver)	60
Urban roads (passenger)	57
Rural roads (driver)	72
Rural roads (passenger)	65
Motorways (driver)	76
Rear seats	
Adults	35
Helmet	
Riders of mopeds	68
Riders of motorcycles	64
Riders of motorised two-wheelers	66
Passengers of mopeds	38
Passengers of motorcycles	34
Passengers of motorised two-wheelers	36

For motorcyclists, **helmet wearing** is the most effective passive safety habit. In Morocco, helmets have been compulsory for users of all of motorised-two wheelers since 1976. In September 2017, the helmet-wearing rate in urban areas was 62% for drivers and 30% for passengers. In rural areas, the helmet wearing rate was 77% for drivers and 60% for passengers.

Road safety management and strategies

There are several **factors of influence on Morocco's road safety performance** as captured by the above indicators. The number of police-reported road fatalities peaked in 2011, with 4 222 persons killed. In the succeeding three years (2012-2014), there was a continuous decrease in road fatalities, and again an increase in 2015 and 2016. Encouraging results were achieved in 2017 and 2018.

Morocco has experienced strong growth of its vehicle fleet with an estimated increase of 100%, from 1.9 million vehicles in 2004 to 3.8 million in 2016. Over the same period, the traffic volume, measured as vehicle-kilometres travelled, grew by 87%.

The first national road safety strategy was implemented between 2004 and 2013 and led to some progress, but which was not homogeneous over the entire period. During the period 2006-08 there was an increase in the number of fatalities, with growth rates comparable to those of the pre-strategy period. In addition, a significant increase was recorded in 2011 (12% more road fatalities when compared to 2010). However, a decrease in the number of road fatalities was recorded in 2005, 2010 and in the period 2012-13. The drop in 2005 was explained by the implementation of a memorandum from the Minister of Justice ordering the withdrawal of driving licences for traffic violations.

The cancellation of this memorandum during the first half of 2006 led to an increase in the number of road crashes. The decline in 2010 was explained by the launch of the new Highway Code. However, lack of enforcement led to the increase in road fatalities recorded in 2011.

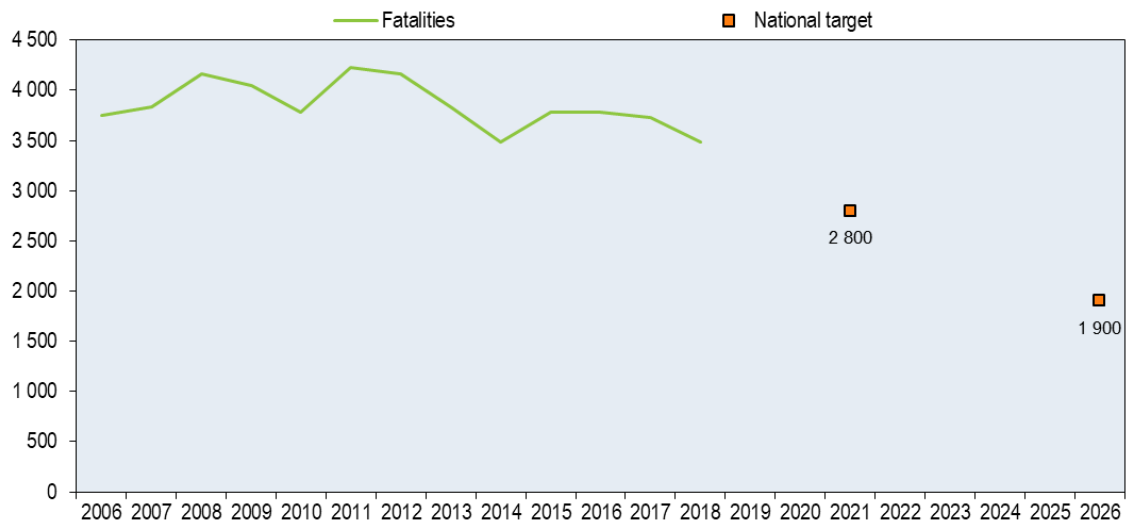
Responsibility for the organisation of road safety in Morocco lies with the Directorate of Road Transport and Road Safety in the Ministry of Transport, Infrastructure and Logistics. In 2006, several committees dedicated to road safety were created:

- The Interministerial Committee for Road Safety, chaired by the Head of Government, is responsible for the validation of national road strategies, as well as the co-ordination, monitoring and evaluation of the implementation of action plans.
- The Permanent Committee for Road Safety, chaired by the Minister of Transport, Infrastructure and Logistics, acts as the technical secretariat for the Interministerial Committee.
- Regional committees for road safety.

In February 2018, the government adopted a law for the creation of a national road safety agency. The Agency should be operational in January 2020 and will be in charge of the implementation and management of all actions related to road safety. The Agency is a public independent body, administered by a board of directors and managed by a director. The Agency is chaired by the Head of Government.

The current road safety strategy covers the period 2017-2026 and is based on five pillars: pedestrians, motorcycles, single vehicle crashes, children and professional transport. It includes the following targets:

- Reduce the number of deaths to less than 2 800 by 2021 (decrease of 20% from 2015 to 2021).
- Reduce the number of deaths to less than 1 900 fatalities by 2026 (decrease of 50% from 2015 to 2026).

Figure 5. Trends in road fatalities towards national targets

Measures

Several measures to improve road safety management have recently been put into place.

Road safety management

- The creation of the National Road Safety Agency was announced in 2018. The Agency should be operational in January 2020. The Agency will be in charge of the coordination, implementation and management of all actions related to road safety: piloting the national road safety strategy, issuing motorcycle and motor vehicle registration cards, driving licence examinations, demerit point system management, technical inspections and inspections of all motor vehicles, issuing authorisations for driving schools and their instructors, communication campaigns, acquisition of enforcement equipment.

Road users

- Acquisition of 552 fixed radars and 280 mobile radars for speed enforcement in 2018.
- Distribution of 10 000 bicycle helmets and 10 000 motorcycle helmets in 2017.
- Communication campaigns implemented on specific topics: speed, seat belts, use of mobile phones while driving, respecting pedestrian crossings.
- Enhanced enforcement of traffic rules, traffic documents and speed limits.

Infrastructure

- Strengthening road signalling on 5 200 km of dangerous road sections.

- Construction of four pedestrian bridges outside urban areas.
- Equipment of 60 schools with pedestrian safety barriers.

Vehicles

- Ban of Bullbars for lightweight cars.
- Audit of technical inspection centres that are suspected of delivering counterfeit inspection certificates.
- School transport vehicles equipped with a seat and seat belt for each child.

Post-crash measures

- Rehabilitation of eight hospital emergency service units in terms of infrastructure and biomedical equipment.
- Creation of eight new proximity medical emergency units.
- Creation of seven mobile peripherals of emergency and recovery services.
- Acquisition of 102 ambulances equipped with special technical equipment (extrication) in 2017.
- Construction of five civil protection emergency units in 2017.
- Strengthening the capacity of 40 medical and nursing staff working in emergency medicine in 2017.
- Hiring and training 200 civil protection workers in 2017.

Definitions, methodology, data collection

- Road fatality: any person killed immediately or dying within 30 days as a result of a road crash.
- Seriously injured person: any person injured in a road crash requiring hospitalisation for six days or more.
- Slightly injured person: any person injured in a road crash requiring medical treatment or hospitalisation of less than six days.

In Morocco, crash data are collected at the scene of the crash by the Gendarmerie in rural areas and the national police in urban areas. Police are expected to attend all injury or fatal crashes. Data related to accidents involving material damage only are not recorded.

Crash information is filled in on a form similar to that used in France. This form contains information on the circumstances of the crash, the location, the casualties, etc. It is planned to progressively introduce Global Information System (GIS) information into police reports.

Data are consolidated at the national level by the Roads Directorate, part of the Ministry of Equipment, Transport and Logistics, and are entered into a database administered by the same entity since the 1970s.

Police liaise with hospitals to complete their reports in case of injuries; however there is no information on the specific level of injuries such as classifications using the International Classification of Diseases 10 (ICD-10) system.

The level of underreporting is not known. In its 2018 global status report (WHO, 2018), the World Health Organization estimated that in 2016 the total number of road fatalities was between 6 100 and 7 700 whereas the reported number was 3 785.

Resources

Recent research

A road user behaviour study through roadside surveys was conducted in 2017 and 2018, including on the use of seat belts and helmets, crossing through a red traffic light or a stop sign, etc. (<http://aujourd'hui.ma/automobile/etude-du-cnpac-seulement-48-des-automobilistes-sarretent-au-stop>, <http://aujourd'hui.ma/societe/etude-2018-du-cnpac-seulement-58-des-automobilistes-portent-la-ceinture-de-securite>)

A population-based questionnaire study on the prevalence and use of the mobile phone while driving was carried out in July 2017.

Websites

Comité National de Prévention des Accidents de la Circulation (CNPAC): <http://www.cnpac.ma/fr/>

Ministry of Transport: <http://www.equipement.gov.ma/AR/Pages/Accueil.aspx>

References

WHO (2018), *Global status report on road safety 2018*, World Health Organization, Geneva, https://www.who.int/violence_injury_prevention/road_safety_status/2018/en/

Road safety and traffic data

	1990	2000	2010	2016	2017	2018	2017 % change over			
							2016	2010	2000	1990
Reported safety data										
Fatalities	2 777	3 627	3 778	3 785	3 726	3 485	-1.6%	-1.4%	2.7%	34.2%
Injury crashes	32 992	48 350	65 461	80 680	89 375	..	10.8%	36.5%	84.9%	170.9%
Injured persons hospitalised	..	..	..	109 371	119 519	..	9.3%	..	..	..
Deaths per 100,000 population	11.5	12.7	11.8	11.0	10.7	9.9	-2.6%	-9.7%	-16.1%	-7.0%
Deaths per 10,000 registered vehicles	29.0	21.7	13.5	10.0	..	..	..	..	..	..
Fatalities by road user										
Pedestrians	987	1 132	995	996	1 032	..	3.6%	3.7%	-8.8%	4.6%
Cyclists	124	233	219	222	227	..	2.3%	3.7%	-2.6%	83.1%
Motorised two wheelers	371	414	714	1 087	1 084	..	-0.3%	51.8%	161.8%	192.2%
Passenger car occupants	568	692	890	1 181	1 115	..	-5.6%	25.3%	61.1%	96.3%
Other road users	727	1 156	960	299	268	..	-10.4%	-72.1%	-76.8%	-63.1%
Fatalities by age group										
0-14 years	..	..	..	344	303	..	-11.9%	..	..	..
15-17 years	..	..	..	143	135	..	-5.6%	..	..	..
18-20 years	..	..	..	193	200	..	3.6%	..	..	..
21-24 years	..	..	..	317	315	..	-0.6%	..	..	..
25-64 years	..	..	..	2 292	2 270	..	-1.0%	..	..	..
65-74 years	..	..	..	249	268	..	7.6%	..	..	..
≥ 75 years	..	..	..	173	180	..	4.0%	..	..	..
Fatalities by road type										
Urban roads	..	..	..	1 233	1 225	..	-0.6%	..	..	..
Rural roads	..	..	..	2 328	2 224	..	-4.5%	..	..	..
Motorways	..	..	..	224	277	..	23.7%	..	..	..
Traffic data										
Registered vehicles (thousands)	956	1 675	2 791	3 791	..	..	..	..	..	..
Registered vehicles per 1,000 population	39.6	58.8	87.5	109.9	..	..	..	..	..	..

Note: registered vehicles do not include mopeds.