



FRANCE

Source: IRTAD, ONISR France mainland

Inhabitants in 2012	Vehicles/1 000 inhabitants in 2012	Road fatalities in 2012	Fatalities /100 000 inhabitants in 2012
63.4 millions	650	3 653	5.8

1. Road safety data collection

Definition

- Fatality: person who died within 30 days following a road crash. Before 2005, fatalities were counted within 6 days. For international comparisons, a correction factor is applied for years before 2005.
- Hospitalised: non-fatal casualty who stayed longer than 24 hours in hospital.
- Slightly injured – non-fatal casualty who received medical care but did not stay in hospital longer than 24 hours.

Data collection

French official road safety information comes from the National Road Traffic Accident (RTA) database and presents results for mainland France only, unless specifically specified that overseas areas data are included.

Road traffic accidents (RTA) leading to injury are recorded by the police force onto their own software according to a dedicated format (BAAC). These files are then gathered centrally into a Web-based software and constitute the National RTA database. This process is managed by the French Road Safety Observatory (ONISR), with the assistance of technical teams from the French Research Centre on Risks, Environment, Mobility and Planning (CEREMA) and the network of local Observatories to check and complement the information as necessary.

The latest version of the BAAC file dates from a 2007 decree that characterises a road traffic accident involving physical injury (fatal or non-fatal). Proven suicides and intentional murders are not registered as RTA.

Monitoring the quality of data is also ensured partially by comparing with the Rhône register – information gathered in the Rhône area from hospitals. Information on the number of killed is very accurate, as are the records Serious injury crashes are usually recorded accurately as well. However, there are some variations across the country about the way slight injury accidents are recorded or not.

In the short term, as some expertise has been developed using both the Rhône register and the National RTA database, it is planned to build a national estimate for MAIS 3+ victims from these in order to provide the relevant information requested by the European Commission for their 2014 baseline.

2. Most recent safety data

Safety performance in 2012

Road deaths in France decreased by 7.8 % in 2012 in comparison with 2011, and by 8.5% in comparison with 2010. The number of road fatalities (3 653 persons) was the lowest since 1948. Both the number of injury crashes and hospitalised people decreased (by 7.1% and 8.5% respectively) in 2012 in comparison with 2011.

In 2011, unusual weather and calendar specificities (a dry year, the hottest since 2003) had been particularly unfavourable to road safety. Seasonality in 2012 was close to the average as regards temperatures, sunshine or rain. Progress in road safety was likely more spread across both years, and partly influenced by the economic downturn.

Provisional data for 2013

In 2013, the downward trend strengthened. Provisional data show a 10.5% decrease in the number of fatalities compared to 2012. A marked reduction was observed for children and young people under 24 (by 16%), and a more modest decrease for pedestrians and motorcyclists (by 5% each).

The progress between 2012 and 2013 was particularly significant during the first semester, which can be attributed to strong communication campaigns, particularly regarding the launch of new mobile automated speed cameras; bad weather conditions, which led to fewer leisure journeys – especially for PTW and pedestrians; and the increase in fuel price, which favoured ecodriving.

3. Trends in traffic and road safety (1990- 2013)

Traffic

Between 1990 and 2012, the number of motorised vehicles increased by 45% and the overall vehicle kilometres driven by 29%. Over the past 10 years, including 2013, traffic has been more or less stable. Slight variations can be observed according to fuel prices, and some downward trend in HGV traffic according to the economic downturn.

Change in the number of fatalities and injury crashes (1990-2012)

Between 1990 and 2012, the number of fatalities decreased by 67%. One can distinguish the following periods:

- **From 1990 to 2000** : In 1989 the publication of the White Paper on Road Safety paved the way for the future road safety policies on improving and enhancing enforcement that would come into effect 10 years later.

- In 1990, the maximum speed limit in built-up areas was set at 50 km/h.
- In 1990, the maximum blood alcohol content level (BAC) was lowered to 0.5 g/l.
- The demerit point system was introduced in 1992.
- Most motorway network construction was achieved during this period.
- Most vehicles were equipped with airbags.
- The educational continuum was implemented.

Despite these measures, fatalities only decreased by 20% over the period, as traffic increased by 20%. In 2000, 15 people were killed per billion veh-km driven.

- **From 2000 to 2010:** In July 2002, French President Jacques Chirac named Road Safety one of his 4 main priorities.
 - The first permanent automated speed cameras were introduced in 2003.
 - A Road Safety National Council was installed for both public and private stakeholders to meet and present action proposals to the government.
 - Probationary licences were introduced in 2004.
 - A driver caught exceeding the maximum blood concentration level would lose six points.

This policy made it possible to break through the symbolic level of 5 000 fatalities per year in 2006. Fatalities fell by 51% over the 10 year period. Among the factors for this reduction, 75% could be attributed to the reduction in average speed and 11% to improved vehicle safety. At the same time, global traffic was up 7%. In 2010, 7 people were killed per billion veh-km driven; in 2013 this rate should be below 6.

- **Between 2010 and 2013:** fatalities decreased by 18%. The decrease was of 4% for pedestrians, nil for pedal cyclists, 36% for moped riders but 10% for motorcyclists, 24% for car users and 12% for HGV users. Fatalities among 18-24 year olds decreased by 23 %.

Rates

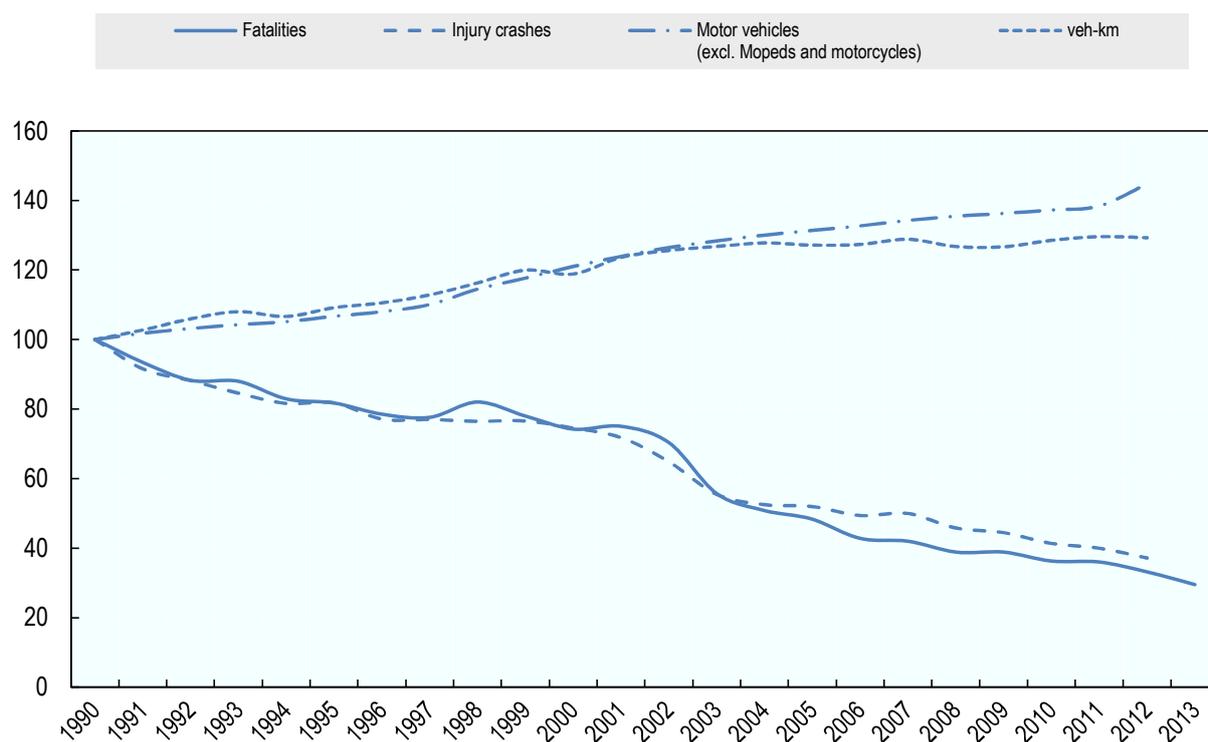
In 2012, the fatality rate expressed in terms of deaths per 100 000 population was 5.8 and the fatality risks, expressed in terms of deaths per billion veh-km, was 6.5; respectively, a 71% and 73% reduction compared to 1990 levels. During the same period, the number of vehicles per 1 000 population has increased by 29%.

Table 1. Road safety and traffic data

	1990	2000	2010	2011	2012	2012 % change from		
						2011	2000	1990
Reported safety data								
Fatalities	10 999	8 170	3 992	3 963	3 653	-7.8%	-55.3%	-66.8%
Injury crashes	162 573	121 223	67 288	65 024	60 437	-7.1%	-50.1%	-62.8%
Injured persons hospitalised	–	–	30 393	29 679	27 142	-8.5%	–	–
Deaths per 100,000 population	19.8	13.7	6.4	6.3	5.8	-8.3%	-58.0%	-70.9%
Deaths per 10,000 registered veh.	3.9	2.3	1.0	1.0	0.9	-0.1	-0.6	-0.8
Deaths per billion vehicle kilometres	25.7	15.6	7.1	7.0	6.5	-7.4%	-58.5%	-74.8%
Traffic data								
Registered vehicles ¹ (thousands excl. mopeds)	28 106	33 452	37 625	37 941	41 236	8.7%	23.3%	46.7%
Vehicle kilometres (millions)	419 800	518 200	552 200	565 000	565 300	-0.1%	9.1%	34.7%
Registered vehicles per 1,000 population)	496	568	599	601	650	-	-	-

Source: ONISR

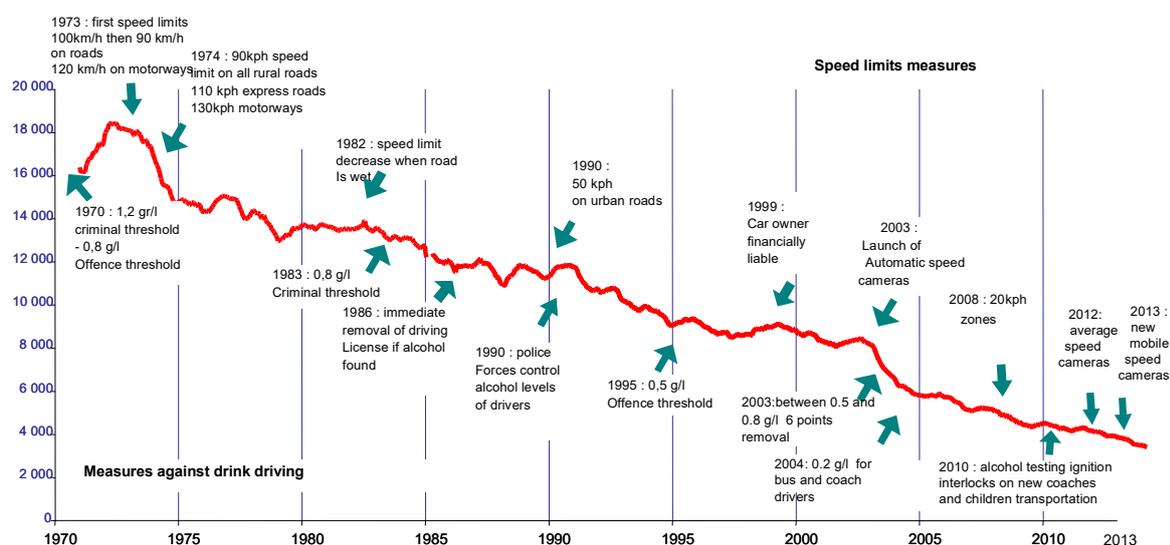
Figure 1a. Road safety and traffic data
1990 = index 100



Source: ONISR

¹ Registered vehicles excluding mopeds.

Figure 1b. **Road fatality trend in France, and road safety measures on speed and alcohol**
1970-2013 (12 month floating average)



Source: ONISR

Road users

Among the 310 lives saved in 2012 in comparison with 2011, 180 were car occupants (reduction of 8.7%), 96 were motorcyclists (reduction of 12.6%), 41 were moped riders (-18.6%) and 30 were pedestrians (-5.8%). There were, however, 23 more cyclists killed (+16.3%).

Since 2000, car occupants benefited the most from road safety improvements (-64.4%). The good results for mopeds (-60.7%) needs to be seen in the context of strong decrease in this travel mode. The number of motorcyclists killed between 2000 and 2012 decreased by only 29.1%. The good results in 2012 compensate for the strong increase (+8%) in 2011. 83% of motorcyclists killed in 2012 rode a motorcycle above 125 cm³.

Soft modes have experienced a less favourable trend. The number of pedestrians killed decreased by 41.6% between 2000 and 2012. After a strong increase in 2011 (+7%), pedestrian mortality returned in 2012 to the level of 2010. The number of cyclists killed decreased by 39.3% between 2000 and 2012, but faced a severe increase (+16.3%) in 2012. It can be noted that since 2000, cycling is developing in French city centres thanks to the availability of the easy bicycle rental services in main towns, and more bicycle friendly infrastructures both in, and outside, built-up areas.

Table 2. Road fatalities by road user group

	1990	2000	2010	2011	2012	2012 % change from		
						2011	2000	1990
Bicyclists	429	273	147	141	164	16.3%	-39.9%	-61.8%
Mopeds	702	461	248	220	179	-18.6%	-61.2%	-74.5%
Motorcycles	1 011	947	704	760	664	-12.6%	-29.9%	-34.3%
Passenger car occupants	6 729	5 351	2 117	2 062	1 882	-8.7%	-64.8%	-72.0%
Pedestrians	496	848	485	519	489	-5.8%	-42.3%	-1.4%
Others incl. unknown	1 632	290	291	261	275	5.4%	-5.3%	-83.1%
Total	10 999	8 170	3 992	3 963	3 653	-7.8%	-55.3%	-66.8%

Source: IRTAD

Age

Among the 310 lives saved in 2012, 60 are young people in the 18-24 age group, representing a decrease of 7%. The only age group which observed an increase are the 75+ year olds.

Between 2000 and 2012; the largest decrease was observed for teenagers and children (-69.6% for 10-14 year olds, -67.6% for the 6-9 year olds, -66.9% for the 0-5 year olds). The reduction for seniors above 65 was smallest (-44%).

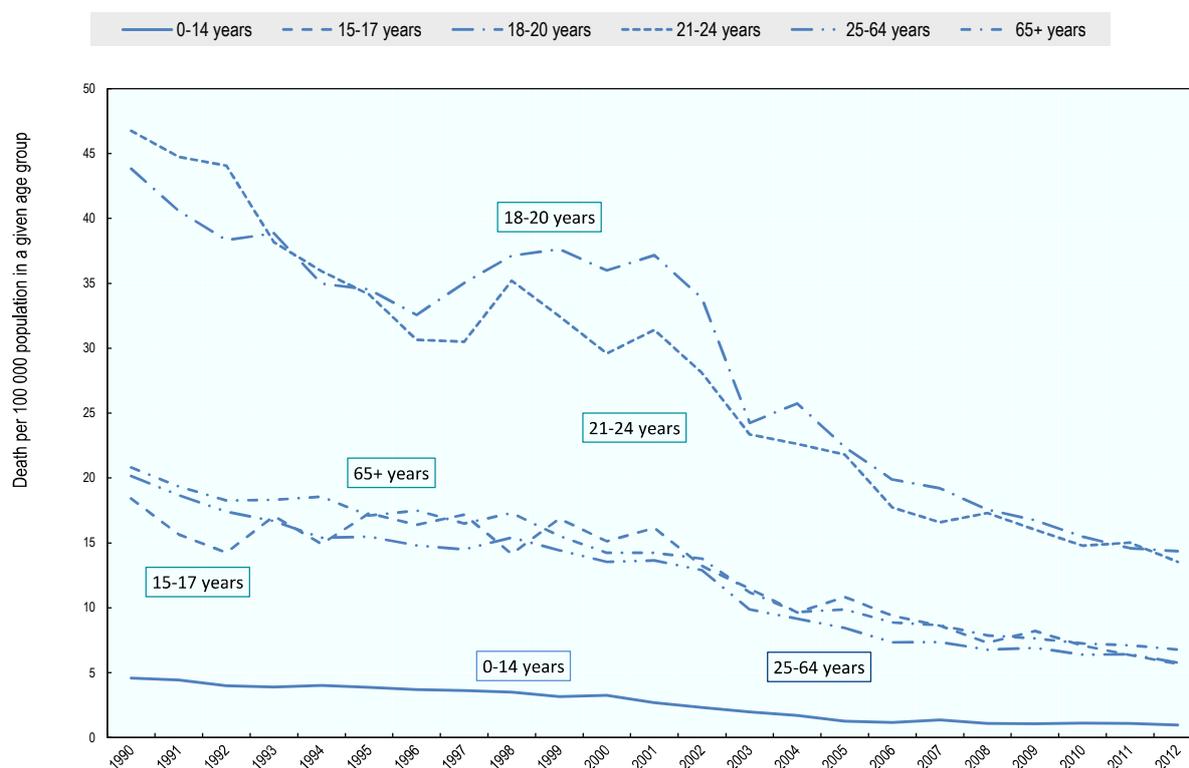
In 2012, the 75+ represented 13.2% of all fatalities. This figure was 8.9% in 2000. This evolution is mainly due to the demographic evolution and the ageing of society. The 75+ represented nearly 50% of all pedestrian fatalities in 2012.

In 2012, nearly one quarter of fatalities involved a novice driver (holding a licence for less than two years). The risk (in terms of km driver) of a novice driver being killed is four times higher than that for an experienced driver.

Table 3. Road fatalities by age group

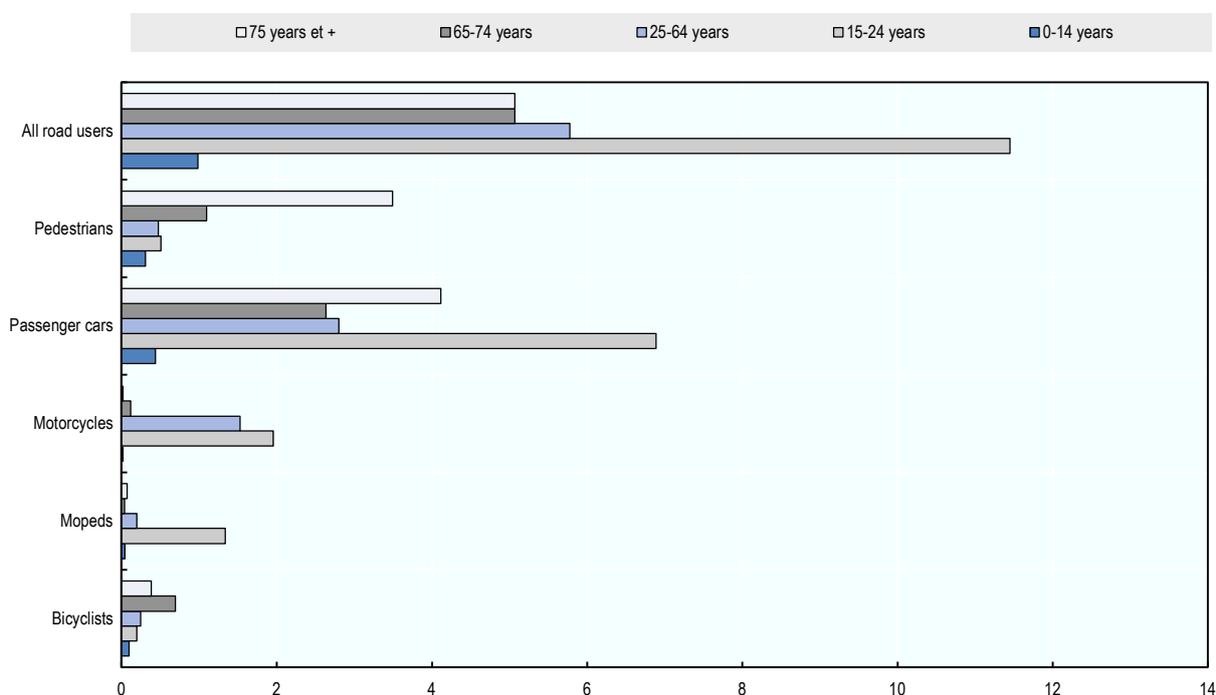
Age	1990	2000	2010	2011	2012	2012 % change from...		
						2011	2000	1990
0-5	204	125	45	48	41	-14.6%	-66.9%	-78.0%
6-9	124	68	27	29	22	-24.1%	-67.6%	-82.5%
10-14	207	173	58	51	52	2.0%	-69.6%	-75.4%
15-17	463	354	161	144	131	-9.0%	-62.6%	-72.2%
18-20	1 131	867	370	346	334	-3.5%	-61.0%	-71.0%
21-24	1 563	879	461	467	419	-10.3%	-51.8%	-73.7%
25-64	5 672	4 204	2 105	2 119	1 909	-9.9%	-54.1%	-67.0%
65-74	742	631	264	280	264	-5.7%	-55.3%	-62.0%
>75	865	727	500	478	481	0.6%	-29.3%	-40.5%
Total incl. unknown	10 999	8 170	3 992	3 963	3 653	-7.8%	-52.2%	-64.5%

Source: IRTAD

Figure 2. Road death rates by age group
Fatalities per 100 000 population in a given age group, 1990-2012

Source: IRTAD

Figure 3. **Road death rate by age and road user group**
Fatalities per 100 000 population



Source: IRTAD

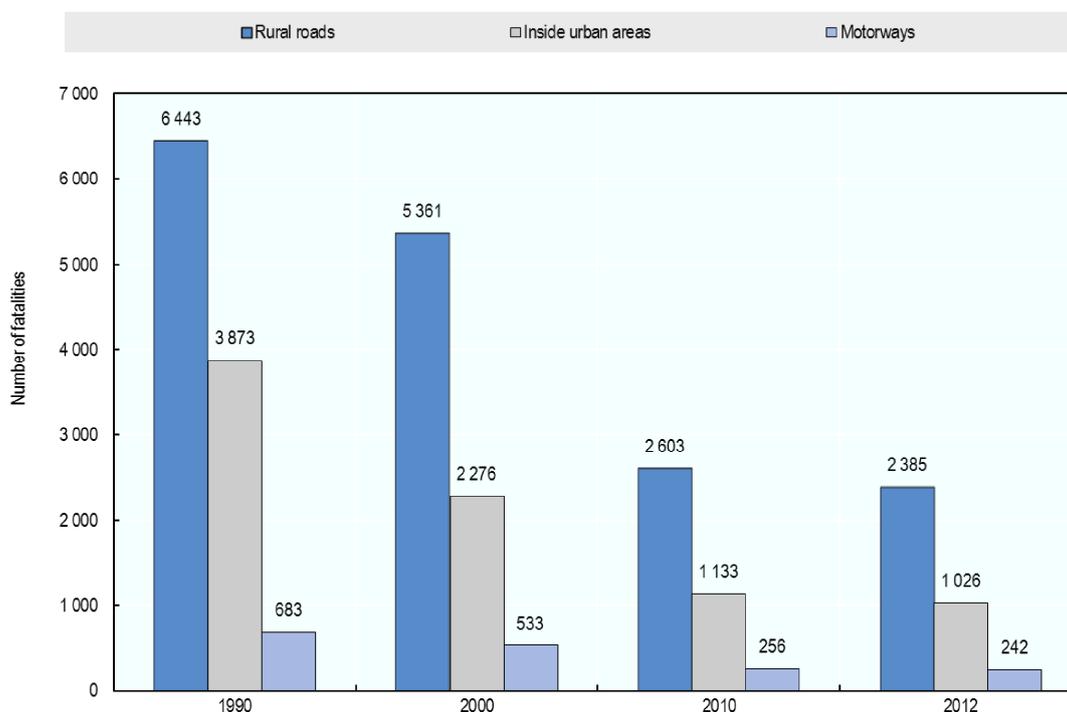
Road Type

France has a very large road network (more than 1 million kilometres), of which 80% is rural (not including interurban motorways). When fatalities per billion vehicle-km travelled are broken down by type of road, the risk on country roads is shown to be very high. Motorways are the safest network, since they absorb 26% of the traffic and account for 7% of fatalities.

In 2012, 65% of fatalities occurred on rural roads, 28% on urban roads and 7% on motorways. The reduction benefited the whole network.

More than half of people killed die on a 90 km/h speed limited single carriageway, outside built-up areas (road with a 90 km/h speed limit).

Figure 4. Road fatalities by road type



Source: IRTAD

4. Economic costs of traffic crashes

Traffic crashes represent a very significant cost for society, estimated in 2012 around EUR 22 billion, i.e. 1% of GDP. These costs have been steadily decreasing since 2005, due to the continuous improvement in safety level

Since 2003, the French Road Safety Observatory uses the same methodology to estimate road crash costs and updates every year the unit cost for a fatality, an hospitalised person, a slight injury and a damage only crash, based on inflation rate and household consumption.

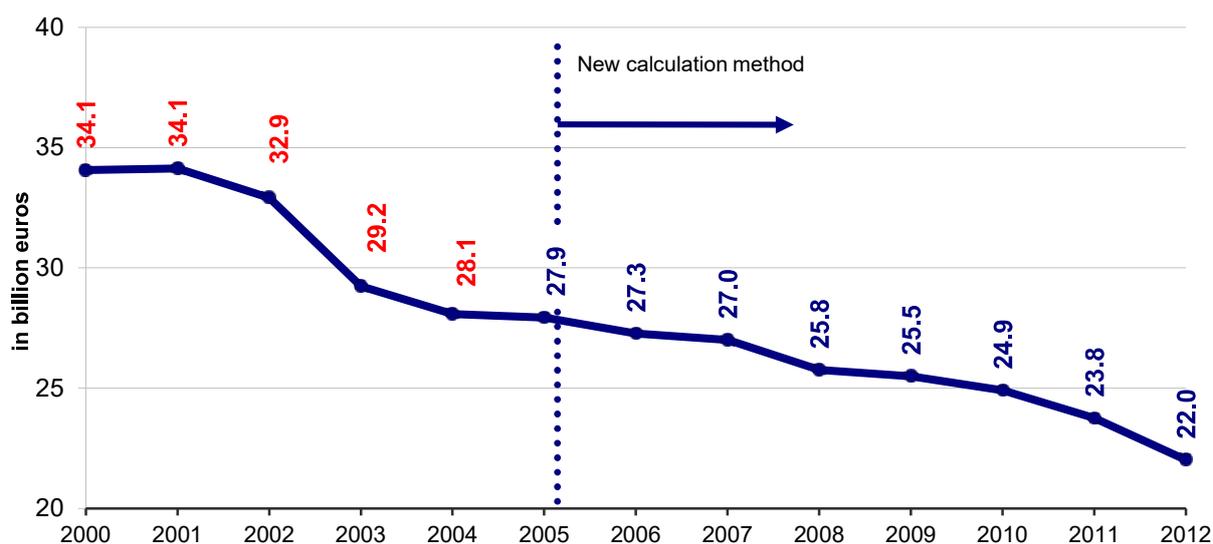
Injury crashes represent a cost of around EUR 9.5 billion, including EUR 4.9 billion for fatalities, 3.9 billion for hospitalised persons, 0.3 billion for slight injuries and 0.4 billion for property damage. Non-injury crashes entail property damage costs estimated at EUR 12.5 billion. This means that half of the crash costs concern property damage only crashes, and this figure does not take into account crashes without third party.

Table 4. **Costs of road crashes**
2012

Costs (EUR)	Unit Cost (EUR)	Total
Fatalities	1,342,072	4.9 billion
Hospitalised people	143,787	3.9 billion
Slight injuries	5,752	0.3 billion
Property damage costs of injury crashes	6,778	0.4 billion
Property damage of non injury crashes		12.5 billion
Total (EUR)		22 billion
Total as % of GDP		1%

Source: ONISR

Figure 5. **Costs of road crashes between 2010 and 2012**



Source: ONISR

5. Recent trends in road user behaviour

Impaired driving

Drink driving

It is an offence to drive with a blood alcohol content (BAC) level over 0.5 g/l. The maximum BAC level for bus drivers is 0.2 g/l.

In 2012, 5 240 injury crashes and 925 fatalities involved a driver with a BAC above the legal limit. The share of fatal crashes involving at least one driver with a BAC above 0.5 g/l has remained stable over the past 10 years at around 30%. Drinking and driving concerns all age groups.

Drugs and driving

In 2012, 531 fatalities (14.5% of all road deaths) involved a driver controlled positive for illegal drugs illegal drug. In reality, this figure is probably higher as it is estimated that in 38% of fatal crashes, results of the drug test are not included in the files.

Half of the drivers positive to a drug tests have a BAC level above the legal limit. A study among drivers estimated that 3% of crashes could be attributed to the consumption of medical drugs.

Distraction

Some studies show that between 25% and 50% of injury crashes are due to a lack of attention, but these incidents are difficult to report. In police files, the factor "distracted attention" was mentioned in 8.7% of fatalities in 2012.

Mobile phone: It is forbidden to drive with a hand-held mobile phone, but the use of hands-free mobile phones is tolerated. In 2012, a roadside survey showed that at any given time, 2% of car drivers were using a hand-held phone while driving.

A study undertaken in 2010 estimated that 10% of injury crashes could be attributed to phone use while driving.

Fatigue

Among contributing factors to a crash, police files include *sickness and fatigue*. According to these files, sickness and fatigue are a contributing factor in 8% of fatal crashes and this figure has remained stable over the past years.

Speed

In 2012, inappropriate or excessive speed was the main causation factor in at least 25% of fatal crashes.

Since 2000, the average speed during daytime has been reduced by 9.7km/h, corresponding to an 11% decrease. During the same period, road fatalities decreased by 55%. However, in 2012 a 0.3 km/h increase in average speed is observed, not because of the main light vehicle flow, but due to the weight of the positive variation in motorcyclists and HGV average speeds.

Between 2000 and 2012, the share of drivers above the speed limits was halved from 60% to 30%.

The table below summarises the main speed limits in France.

Table 4. **Passenger car speed limits by road type, 2014**

	General speed limit	Comments
Urban roads	50 km/h	
Rural roads	90 km/h	80 km/h by wet weather
Motorways	130 km/h	110 km/h by wet weather or for novice drivers

Source: ONISR

Seatbelts and helmets

Seat-belt wearing is compulsory in front seats since 1973 and in rear seats since 1990. The seat-belt wearing rate is among the highest in OECD countries; however, there is still room for improvement, especially for the rear seats. In 2012, the wearing rate on front seats was 98.5%. The wearing rate on rear seats is lower at 84%, with an important variation for children (90%) and adults (80%).

In 2012, 19% of vehicle occupants killed were not wearing a seatbelt (or the seatbelt was not well buckled) when the crash occurred.

Between 2000 and 2010, the number of persons killed in a road crash while not wearing a seatbelt decreased more significantly than the overall mortality (-65.4% vs -51%). This can be explained by a higher rate of seatbelt use and also a decreasing trend in crash impact speed. From 2004, measures came into effect whereby 3 demerit points (instead of 2) were attributed to the non-wearing of seatbelts while driving.

Table 5. **Seat-belt wearing rate by car occupants**

	2005	2013
Front seat		
General	97.1%	98.5%
Urban roads	94.2%	
Rural roads	98.3%	
Rear seats		84%
Adults	69.8%	80%
Children	83%	90%

Source: ONISR

Since 1973, all riders of motorised two-wheelers (mopeds and motorcycles) are required to wear helmets. The helmet-wearing rate of motorcyclists (above 50 cc) is high, at 93%. Nevertheless in 2012, 20 of the motorcyclists killed (3.5%) did not wear a helmet. For moped riders, the helmet-wearing rate is 95.8%. In 2012, 25 moped riders killed (13.4%) did not wear a helmet.

There is no mandatory helmet use law for cyclists.

6. National road safety strategies and targets

Organisation of road safety

Since the recent change of government in 2012, the Lead Agency for Road Safety (Road Safety Inter-ministerial Directorate – DSCR) reports to the Minister of the Interior. The Minister of the Interior chairs the Inter-ministerial Road Safety Committee (CISR), an Assembly of ministries' representatives, where decisions are taken. The French Road Safety Observatory (ONISR) reports to the Road Safety Director and is in charge of managing the Road Traffic Accident Database, analysing Road Safety Performance and leading studies and research in Road Safety to prepare for new

measures. It is also in charge of assisting the National Road Safety Council (CNSR), composed of 50 members from public service, enterprises, victims and road users' representatives, in presenting Road Safety action proposals to the government.

Road safety strategy for 2011-2020

In order to reduce the number of road deaths by half over the period 2011-2020, and achieve less than 2 000 persons killed in a year on French roads by the end of the decade, the government needs to mobilise all means at its disposal. The National Road Safety Committee is expected to propose an action plan.

A series of measures has already been submitted to the Minister of Interior in 2013 (static information signs ahead of automated speed cameras, one-size plates for mopeds and motorcycles, prohibition of over-tinted glass for lateral car windows, high visibility vests for motorcyclists, etc.). Some of these are already implemented; for the rest, legislation is underway.

Target setting

In line with the target set by the European Commission, France has the aim to reduce by half the number of fatalities by 2020. The key priorities to achieve this target are to:

- reduce fatalities among young people and novice drivers;
- reduce fatalities among motorised two wheelers;
- combat the main crash-contributing factors, like speed and impaired (alcohol/drug) driving.

Monitoring

So far, France is on track to achieve the target set for 2020.

Figure 5. Trends in road fatalities towards national target



Source: ONISR

7. Recent safety measures (2011-2013)

Road safety management

- The Road Safety Directorate, as Lead Agency for Road Safety, is an inter-ministerial agency and works closely with all relevant ministries, in particular the ministry of Ecology (in charge of Transport matters) but also the ministries of Education, Health, Work, and Justice. Its move to the Ministry of the Interior has enhanced its partnership with Police Forces, with benefits for more tailored education and enforcement actions and for the quality of data collection.
- An expert Committee advising the national Road Safety Committee (CNSR) produced a first report, in November 2013, on the main actions to be taken to progress towards the 2020 target. Intensive debates are taking place within the National Road Safety Committee to address the relevant proposals for action.

Licenses

- As a result of a European Directive, new driving licence categories were created and are in place since January 2013: AM for mopeds and A2 for motorcycles of average power, hence implementing progressive access to motorised two-wheelers based on their power.

Driver behaviour

Speed management

- Since 2002, an important programme of automated speed cameras has been rolled out. As a result, over the past 10 years average speed has been reduced by 10%. A study by L. Carnis and E. Blais² shows that up to three quarters of the decrease in fatalities is due to the implementation of this programme.
- At the end of 2012, there were 2 345 fixed speed cameras, 929 mobile speed cameras and 713 traffic light radars. The current objective is to modernise the cameras in place and to increase the total number of cameras to 4 200 devices (both for speed and traffic lights crossings).
- In 2013, 180 new devices were displayed but 169 were removed. The current 4 097 devices include :
 - 203 permanent speed cameras that distinguish between light vehicles and HGV;
 - 67 permanent average speed cameras;
 - 79 new mobile speed cameras (covering both directions while driving in the flow);
 - 45 train crossings radars.

Alcohol and drugs

- Many communication and prevention campaigns are carried out at both national, and local, level to raise awareness of the effects of alcohol and drugs consumption on crash risks. Most of these target young people who enjoy drinking at weekends when out. However controls, led by

². <http://www.sciencedirect.com/science/article/pii/S0001457512004137>

police forces (more than 10 million each year) also take place during the week. Drink driving crashes also involve more mature adults, driving in the evening after work.

- All motorised vehicles (except mopeds) should possess a breathalyser, although the intended penalty for not possessing one was removed in March 2013.
- Tribunals can now choose to sentence drink driving offenders to the compulsory use of an alcolock device on their vehicle.

Lack of attention

- A 2012 decree strengthened the penalties against the use of distracting devices:
 - use of a hand held mobile by a driver in traffic is punishable by a 4th class fine and the loss of 3 points (out of 12) from the driving licence;
 - The use of a screen device screen (video games, television) while driving is punishable by a 5th class fine, with a maximum fine of EUR 1 500. The device can also be seized by the police.

Seatbelt use

- Focus is now progressing towards improving child restraint usage. The European research project CaSPER has shown that, while 70% of children were in a seat appropriate for their age, less than half of those were properly secured.

Protective equipment for motorcyclists

- A guide was released in 2012 to promote the benefits of individual protective equipment. In 2014, a partnership with insurance companies, protective equipment providers and bikers' associations will launch an incentive scheme for motorised two-wheelers to purchase personal protective equipment as a package deal (gloves, boots, clothing and, possibly, an airbag suit).

Education and awareness

- In 2013, a new communication campaign was launched on the dangers of excessive or inappropriate speed: "The faster you drive, the more irreversible the consequences". National advertising campaigns to combat alcohol and drugs consumption when driving were widely disseminated (with the well-known character "SAM, the guy who drives and does not drink"). A new initiative took place concerning the text messaging ("When you look at your smartphone while driving, who looks at the road?").
- Important advertising campaigns for motorised two-wheeler users were conducted in 2012 and 2013. The purpose was to make motorcyclists aware of crash circumstances: the slogan "with motorcycles, the danger is in thinking that there is none!", won an award at the 2013 Global Road Safety Festival.
- The Road Safety Directorate (DSCR) financially supports many associations in their involvement in road safety. These associations are essential to addressing a variety of people, acting on the ground and contributing to prevention policies.

Infrastructure

- In order to better protect road workers, emergency services and police forces, penalties were strengthened in 2012 against driving on the hard shoulder or on a closed lane: a driver could lose 3 points when using those lanes, and 1 point when stepping on hard shoulder road markings.
- New motorways will be equipped with rumble strips on the edges of road markings to prevent crashes due to drowsiness. These will also be implemented while renewing existing road markings.

8. Recent and on-going research

- **“Cycling accidents and risk exposure”** (AVER) focuses on road trauma for road user categories: pedestrians, pedal cyclists, motorised two-wheelers and car drivers. It provides a better understanding of the crash risks when cycling, compared to others means of transport. (Amoros, E et al., IFSTTAR, August 2012, <http://hal.archives-ouvertes.fr/hal-00941167>).
- **“Pedestrian, urban environments and crossing decision”** (PETRA) investigates pedestrian carriageway crossings and the use of mental representations. Subjects of various ages were faced with a number of urban environment representations and, according to their understanding, decided whether or not to cross. The study showed few variations between children and adults. Among other factors, pavement quality and building density influenced the decisions. (GRANIE, Marie-Axelle et al., IFSTTAR, February 2012, http://fondation-securite-routiere.org/IMG/pdf_PETRA_Rapport_Final_v4.pdf).
- **An assessment of the safety effects of the French speed camera programme.** The study analysed crash and speed data and concluded that up to three quarters of the decrease in fatalities reported between November 2003 and December 2010 can be attributed to the implementation of automated speed cameras. (CARNIS, L., BLAIS, E, Accident Analysis and Prevention, n°51, 2013 pp. 301-309, An assessment of the safety effects of the French speed camera programme, <http://www.sciencedirect.com/science/article/pii/S0001457512004137>).
- **“An analysis of fatal accidents involving light vehicles outside built-up areas on county roads during the day”** shows that between 2001 and 2010, the share of crashes due to excess speed of 20 km/h and over was reduced from 25% to 6%; those due to excesses between 10 and 20 km/h decreased from 13% to 9%. The number of fatal crashes due to excesses below 10 km/h remains practically constant: in 2001, they used to account for 16% of fatal accidents due to excessive speed and in 2010 represent 46% of those. This estimation is based on annual speed measurements led by ONISR and the use of Nilsson’s model. (VIALON, V., LAUMON, B.: Fractions of fatal crashes attributable to speeding: Evolution for the period 2001-2010 in France, Accident Analysis and Prevention, N°52, 2013 pp 250-256, <http://www.sciencedirect.com/science/article/pii/S0001457512004460>).
- **“Accidents involving heavy goods vehicles on motorways”**- Bibliographic summary – SETRA – November 2012. This study shows the various causation factors of HGV accidents, proposes solutions to improve their HGV users’ safety and that of the other road users. (<http://www.setra.developpement-durable.gouv.fr/IMG/pdf/1230w-rapport-accidentalite.pdf>).

- **ESPARR ECO: Social and economic consequences of road traffic accidents: a victim approach**, December 2011. This is a first contribution to socio-economical stakes that allows the construction of a socio-economical fragility variable (lack of insurance, income loss...). It is centred on victims and on the socio-economic consequences of road accidents. The goal is to help the decision-maker to find the most appropriate measures to help victims (<http://www.predit.prd.fr/predit4/document/42624>)

Useful websites and references

Road safety Website	http://www.securite-routiere.gouv.fr
Road safety in France in 2012	http://www.securite-routiere.gouv.fr/content/download/29563/271205/file/Bilan%20(2012)%20La%20sécurité%20routière.pdf
IFSTTAR - The French institute of science and technology for transport, development and networks	http://www.ifsttar.fr/
CEREMA – The French research centre on risks, environment, mobility and planning (previously SETRA, CERTU, CETMEF and CETE)	http://www.cerema.fr/

Contact

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