

Source: IRTAD, ONISR



Capital	Inhabitants	Vehicles/1 000 inhabitants	Road fatalities in 2011	Fatalities / 100 000 inhabitants in 2011
Paris	65 million	662	3 963	6.09

# 1. Comments about road safety data collection

All road traffic accidents (RTA) leading to injury is recorded by the police using a dedicated template (BAAC). These files are then gathered centrally into a Web-based software and constitute the National RTA file. This process is managed by the National Interministerial Road Safety Observatory and its network of local Observatories that complement the information as necessary. French official road safety information comes from the National RTA file.

Monitoring on the quality of data is ensured partially by comparing information gathered from hospitals in the Rhone county. Information on the number of killed is thought to be very accurate. Serious injury accidents (in terms of MAIS3+ or equivalent) are usually recorded as well. However there are some variations across the country about the way slight injury accidents are recorded or not.

## 2. Short term trends

## **General comments and trends for 2011**

Compared to 2010, there was near stagnation in the number of fatalities, with a 0.7% decrease. The year 2011 was marked by a strong deterioration in the first semester, and a significant reduction on all safety indicators in the second semester.

#### Provisional data for 2012

Provisional data for 2012 show a 8% decrease in the number of fatalities compared to 2011.

# 3. Long term trends (1990-2011)

#### Fleet and mobility

In 2011, the motorised vehicle fleet and the distance travelled increased by 0.8%. The trend is quite different for the various vehicle types: there was an important increase (+3.4%) for light duty vehicles. Following a decrease in 2010, heavy traffic increased by 2.8%. Passenger car traffic observed a very moderate increase (+0.2%), while motorised two-wheeler traffic was stable.

#### Change in the number of fatalities and injury crashes

Since 1990, the number of road fatalities decreased by 64%.

A significant change was introduced in July 2002, when President Chirac announced that road safety was among the priorities of his mandate. Since then, a determined road safety policy has been developed, with effective measures regarding speed management, drink-driving and seatbelt use, the strengthening of the demerit point system, etc.

In 2011, France reached its lowest fatality level since crash data records began.

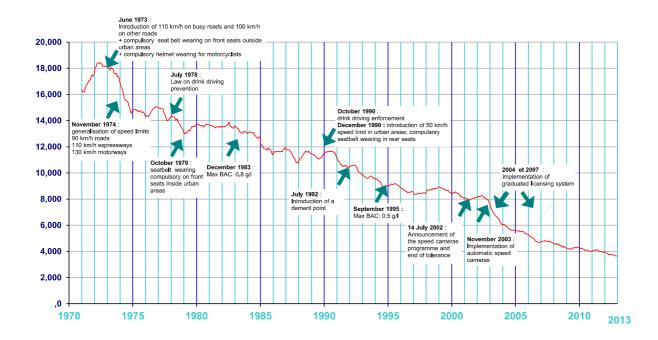


Figure 1. Road safety 1970 2011 mortality and main safety measures

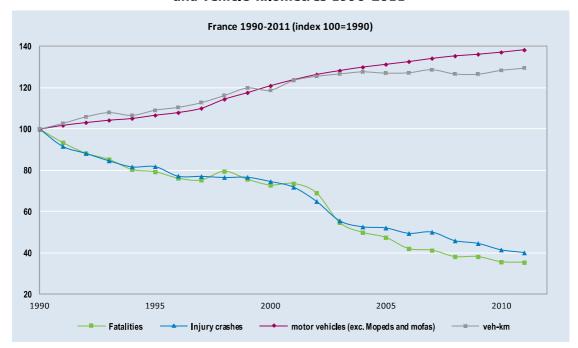
## **Risk and rates**

In 2011, the fatality rate expressed in terms of deaths per 100 000 population was 6.1 and the fatality risks, expressed in terms of deaths per billion veh-km, was 7.0; respectively a 69% and 73% reduction compared to 1990 levels.

Table 1. Safety and mobility data 1990-2011

						2011% ch	ange over
	1990	2000	2010	2011	2010	2000	1990
Reported safety data							
Fatalities	10 999	8 170	3 992	3 963	-0.7%	-51%	-65%
Injury crashes	162 573	121 223	67 288	65 024	-3.4%	-46%	-60%
Deaths/100 000 population	19.82	13.73	6.36	6.09	-4.2%	-56%	-69%
Deaths/10 000 registered vehicles	3.85	2.26	0.99				
Deaths/billion vehicle-kms	25.72	15.59	7.12	7.01	-1.5%	-55%	-73%
Fleet and mobility data							
Vehicles (exc. mopeds) (in thousands)	28 454	34 432	39 060	39 379	0.8%	14%	38%
Vehicle- kilometres (in million)	436 000	518 200	560 400	565 000	0.8%	9%	30%
Motorisation (number of motorised vehicles excl mopeds/1 000 inhabitants)	514.2	607.1		662			

Figure 2. Reported road fatalities, injury crashes, motorised vehicles and vehicle-kilometres 1990-2011



## **Economic costs of traffic crashes**

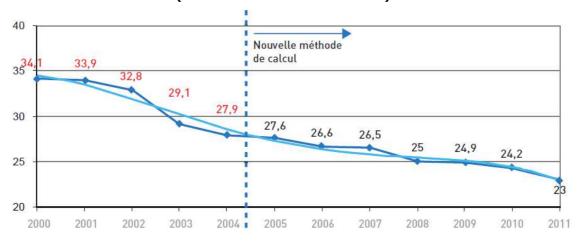
Traffic crashes represent a very significant cost for society, estimated in 2011 around EUR 23 billion, i.e. 1.3% of GDP. These costs have been steadily decreasing since 2005, due to the continuous improvement in safety levels

Since 2003, the National Interministerial Road Safety Observatory uses the same methodology to estimate the economic costs for traffic crashes (based on work by the Commissariat général au Plan), indexed on reference values and updated each year.

Table 2. Costs of road crashes in France

Cost (EUR Billion)	2005	2011	% change
Fatalities - Unit cost: EUR 1 264 448		5.01	
Hospitalised - Unit cost: EUR 132 367		3.93	
Slight injury - Unit cost: EUR 5 295		0.27	
Property damage of injury crashes - Unit cost: 6 783		0.44	
Property damage of non injury crashes		10	
Cost of road crashes	25.1	23	-8.4%
Total as a % of GDP		1.3%	

Figure 3. Evolution in road crash costs (based on constant value 2011)



Source: ONISR

#### Road users

The moderate decrease in fatalities in 2011 had very different patterns for the various road users. Fatalities decreased for cyclists, moped riders and car occupants, but increased quite substantially for pedestrians (+7%) and motorcyclists (+8%). It should however be noted that the number of motorcyclists killed significantly decreased, from 888 deaths to 704, between 2009 and 2010.

Since 2000, there has been an important decrease in road mortality for all road users, but motorcyclists saw a more moderate decrease. In 2011, motorised two-wheelers (mopeds, motorcycles and scooters) represented 25% of all road deaths, but only 2.5% of the traffic.

Table 3. Reported fatalities by road user group 1990-2011

										2011% ch	ange over
	199	90	200	00	201	0	201	1	2010	2000	1990
Bicyclists	437	4%	273	3%	147	4%	141	4%	-4%	-48%	-68%
Mopeds	716	6%	461	6%	248	6%	220	6%	-11%	-52%	-69%
Motorcycles and scooters	1 031	9%	947	12%	704	18%	760	19%	8.0%	-20%	-26%
Passenger car occupants	6 862	61%	5 351	65%	2 117	53%	2 062	52%	-2.6%	-61%	-70%
Pedestrians	1 534	14%	848	10%	485	12%	519	13%	7%	-39%	-66%
Others	635	6%	290	4%	291	7%	261	7%	-10%	-10%	-59%
Total	11 215	100%	8 170	100%	3 992	100%	3 963	100%	-0.7%	-51%	-65%

The relative risk of being killed in a traffic crash varies greatly among road users. Motorised two-wheelers continue to be the group most at risk. In 2010, they represented around 2.5% of motorised traffic but 25% of fatalities. The risk of being killed is 14 times higher for motorcyclists than for car occupants.

Table 4. Relative fatality risk by road user group 2011

	Reported fatalities	Billion veh-km	Deaths per billion veh-km
Passenger car	2 062	420.1	4.9
Mopeds	220	3.4	64.7
Motorcycles	760	10.5	72.4
Heavy vehicles	67	29.2	2.3
Public transport	0	3.5	0

#### Age

Since 1990, all age groups benefited from the improvement of safety levels, with the greatest reduction in mortality for children.

In 2011, the greatest reduction in fatalities were observed for the 10-14 (-12%) and the 15-17 age group (-11%). Conversely, there was a 9% increase for children below 10 years old.

Road crashes is the first cause of mortality for young people between 15 and 24. In 2011, the 18-24 age group represented 8.8% of the population but 21 % of road fatalities.

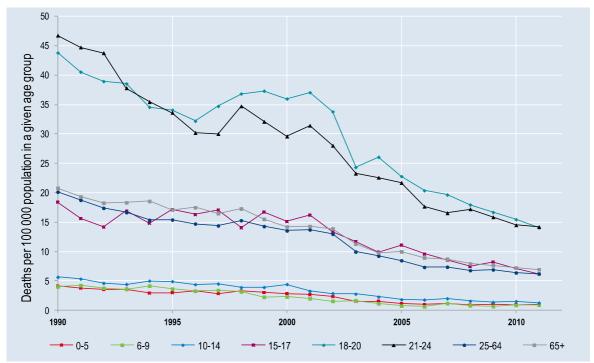
More than half of motorcyclists killed belong to the 25-44 age group; while one third of cyclists killed are aged 65 and older.

Table 5. Reported fatalities by road age group 1990-2011

					2011% change		
	1990	2000	2010	2011	2010	2000	1990
0-5	208	125	45	48	6.7%	-62%	-77%
6-9	126	68	27	29	7%	-57%	-77%
10-14	211	173	58	51	-12%	-71%	-76%
15-17	472	354	161	144	-11%	-59%	-69%
18-20	1153	867	370	346	-6%	-60%	-70%
21-24	1594	879	461	467	1%	-47%	-71%
25-64	5784	4204	2105	2119	1%	-50%	-63%
>65	1638	1500	765	759	-1%	-49%	-57%
Total	11215	8170	3992	3963	-1%	-51%	-65%

Road crashes are the first mortality cause for young people between 15 and 24 years. In 2011, the 18-24 age group represented 8.8% of the population, but 21 % of road fatalities. This group had a mortality risk twice as high as the general population.

Figure 4. Reported death rate by age band (Fatalities per 100 000 population in a given group, 1990-2010)



#### **Road Type**

France has a very large road network (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. However, in 2011 the number of people killed on motorways increased by 15%, while on the other road networks there was a decrease in fatalities.

In 2011, 65% of fatalities occurred on rural roads, 28% on urban roads and 7% on motorways.

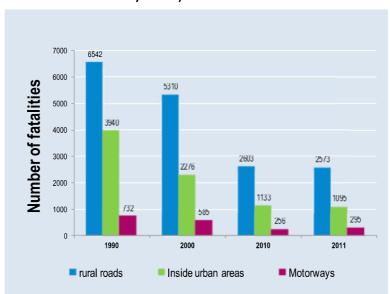


Figure 5. Reported fatalities by road type 1990, 2000, 2010 and 2011

## 4. Recent trends in road user behaviour

#### Impaired driving and fatigue

#### Alcohol

The maximum permissible blood alcohol content is 0.5 g/l and 0.2 g/l for bus drivers.

For the 6<sup>th</sup> consecutive year, drink-driving is the primary cause of death in France (mainly due to the fact that speed-related crashes have diminished). Alcohol is involved in 30% injury road traffic accidents. This percentage has remained stable over the past 10 years. In 2011, 30.8% of fatal crashes (in which 964 persons were killed), involved drivers whose blood alcohol content was above the maximum permissible level.

#### Drugs

In 2011, 499 fatalities (13% of all road deaths) involved a driver with a positive control of an illegal drug.

A study estimated that 3% of crashes could be attributed to the consumption of medical drugs.

#### **Speed**

In 2011, it is estimated inappropriate or excessive speed is responsible for 26% of fatal crashes.

Between 2002 and 2010, the average speed decreased by 10% and the rate of speed violation decreased from 60% in 2002 to 33% in 2010. It is estimated that this contributed toward saving 11 000 lives between 2003 and 2010.

The table below summarises the main speed limits in France.

Table 6. Summary of speed limits for passenger cars in France in 2013

	General speed limit Passenger cars	Comments
Urban roads	50 km/h	
Rural roads	90 km/h	
Motorways	130 km/h	Young drivers are limited to 110 km/h

#### Seatbelts and helmet

#### Seatbelt

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 2011, the wearing rate on front seats was 97.8%. Wearing rate on the rear seats is lower at 84%, with an important variation for children (90%) and adults (78%). In 2011, 22% of vehicle occupants killed were not wearing a seatbelt (or the seatbelt was not properly fastened) when the crash occurred. It is estimated that 336 lives could have been saved in 2011 (8.5% of all people killed) if the victims had worn their seatbelts.

Table 7. Seatbelt wearing rate by car occupants

	2005	2010	2011
Front seat			
General	97.1%	97.8%	97.8%
Urban roads	94,2%	95.5%	95.7%
Rural roads	98.3%	98.9%	98.8%
Rear seats			84%
Adults	69.8%	78.1%	79.7%
Children	83%	91.9%	88.9%

#### Helmet

**Helmet use** is mandatory for motorcyclists (including mopeds) since 1973. It is not compulsory for cyclists. The wearing rate for motorcyclists is estimated at 93%. In 2011, 2% of killed motorcycle drivers and 6% of killed passengers were not wearing a helmet.

#### Distracted driving, use of mobile phone and fatigue

#### Mobile phone:

It is forbidden to drive with a hand-held mobile phone. The use of hands-free mobile phones is tolerated. In 2010, it was estimated that at any time, 2% of car drivers and 6.3% of truck drivers were using a hand-held phone while driving.

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

Fatigue

Fatigue is estimated to be a contributing factor in 8% of fatal crashes.

# 5. National road safety strategies and targets

## **Organisation of road safety**

Since the recent change of government in 2012, the Ministry of Interior is the Lead Agency for Road Safety. The Road Safety Directorate (which includes the National Road Safety Observatory) advises and prepares the works. The National Road Safety Council, composed of 50 members from the public service, enterprises, victims and road users representatives, establishes proposals to the government in terms of Road Safety actions. The Minister chairs the Interministerial Road Safety Committee, an Assembly of ministries' representatives, where decisions are taken.

## Road safety strategy for 2011-2020

A new national Road Safety target was set in 2012, in line with the EU target to halve the number of fatalities during the new decade: France is working towards fewer than 2 000 fatalities by 2020.

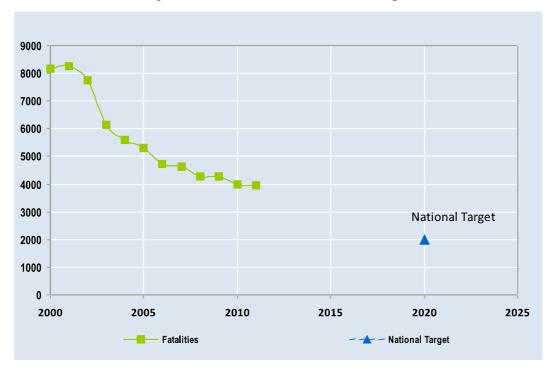


Figure 6. Trends towards national target

# 6. Recent safety measures (2011-2012) and effectiveness of past measures

## **Speed management**

At the end of 2012, 2 345 fixed speed cameras and 929 mobile speed radars were in place throughout the road network. The decrease in average speed between 2002 and 2010 is estimated at 10%. A study shows that 75% of the decline in mortality recorded during this period was due to the presence of the speed cameras.

## Road safety campaigns

Road safety campaigns are produced all-year-round on drink driving, motorcyclists and speed, with messages focused particularly on young drivers.

# 7. Useful websites and references

## Recent and on-going research

**Medicinal drugs that increase the risk of road traffic crashes** (Emmanuel Lagarde, 2011, INSERM). This study showed that slightly more than 3% of road accidents in France were due to consumption of medicinal drugs, corresponding to 120 deaths and 2 500 injuries each year. Drugs carrying a risk are classified in several major therapeutic classes.

Mobile phones and road safety (Collective expertise, 2011, IFSTTAR-INSERM)

# **Useful websites**

Road safety Website	http://www.securite-routiere.gouv.fr
SETRA: The Technical Department for Transport, Roads and Bridges Engineering and Road Safety IFSTTAR - The French institute of science and technology for transport, development and networks	http://www.setra.equipement.gouv.fr/English-presentation.htmlhttp://www.ifsttar.fr/
CERTU: The Centre for the Study of Urban Planning, Transport and Public Facilities	http://www.certu.fr/

## **Contact:**

For more information, please contact: <a href="mailto:onisr.dscr@interieur.gouv.fr">onisr.dscr@interieur.gouv.fr</a>