





Final evaluation of 80 km/h speed limit on single carriageway roads outside built-up areas based on estimated ONISR 2020 data

(dated 25/06/2020)

French Road Safety Observatory

20 July 2020 Final report on 80kph impact 2019 final data, 2020 estimates



The main fatality indicators for 2019 and before have been certified by the French Authority for Public Statistics



Cerema

France at a glance

- Population : 66 million inhabitants
- Area : 600.000 km²
- Exposure : 606 billion veh.km
- 2019: 3 500 RT fatalities (incl overseas)
- 80% population live in urban areas
- 63% RT fatalities on non-motorway roads outside built-up areas





- 2 188 fatalities in France mainland
- 1 546 fatalities in Italy
- 1 163 fatalities in Germany
- 1 096 fatalities in the United Kingdom
- 964 fatalities in Spain

Source : IRTAD, 2016 data for non motorway roads outside urban areas

July 2020 Final report on 80kph impact 2019 final data, 2020 estimates





When the main network represents :

-10% of RN+RD network length, it registers 38% of the fatalities

-20% of RN+RD network length, it registers 55% of the fatalities

-30% of RN+RD network length, it registers 64% of the fatalities

20 July 2020 Final report on 80kph impact 2019 final data, 2020 estimates Cerema 2015-2017 study : Traffic and accident shares of the main county roads (RD)





- President François Hollande : May 2012-May 2017
- November 2012 : 2020 target to reduce fatalities by 50% (Minister of Interior)
- November 2013 : Expert committee of National road safety council advises key measures to meet the target : 300 to 400 lives could be saved each year by reducing the speed limit from 90 to 80 km/h on single carriageways outside built-up areas
- **June 2014 :** National road safety council advises government to experiment a reduced speed limit of 80km/h on rural network
- July 2015 to July 2017 : experiment on 80km of trunk road network (RN)
- President Emmanuel Macron : May 2017-May 2022

routes.

- **December 2017 :** Prime Minister says in the media that from his personal perspective we should decrease the speed limit to 80 km/h
- **9 January 2018 :** Interministerial committee chaired by Prime Minister Edouard Philippe announces 18 new measures.
- 1st July 2018 : speed limit change to 80 km/h on single carriageway roads outside built-up areas
- **24 December 2019 :** the Act on Organising Mobility(Loi d'Orientation des Mobilités)

authorises local authorities to raise the speed limit to 90km/h on certain

20 July 2020 Final report on 80kph impact 2019 final data, 2020 estimates



Cerema

Monitoring key performance indicators for the speed limit reduction to 80 km/h

Cerema task force was organised the following way :

- A « coordination » task led by Marine Millot (*Cerema Méditerranée*) and Emilie Jeannesson-Mange (*Cerema Transport infrastructures and Materials*);
- 4 specific topics:
- « Speed monitoring» led by Eric Violette et Cyrille Le Lez (Cerema Normandie-Centre);
- « Accident analysis» led by

Gilles Duchamp et Nathalie Mompart (Cerema Sud-Ouest);

- « Cultural changes» led by Chloé Eyssartier (Cerema Ouest) ;
- « Societal effects» led by

Valérie Buttignol, Olivier Troullioud et Jean-Romain Raffegeau (Cerema Méditerranée).





Road fatalities strongly decreased between 2017 and 2018 (200 fewer fatalities in 2018).

2019 results showed a stability (4 fewer fatalities compared to 2018), but the trend is dramatically different according to road networks (confirmed decrease outside built-up areas, stability on motorways, strong increase in built-up areas).

Results for the year 2018	Injury accidents	Killed within 30 days	Injured people
2018 final results	55 766	3 248	69 887
2017 final results	58 613	3 448	73 384
Difference 2018 / 2017	-2 847	-200	-3 497
Variation 2018 / 2017	-4,9%	-5,8%	-4,8%

Results for the year 2019	Injury accidents	Killed within 30 days	Injured people	
2019 final results	56 016	3 244	70 490	
2018 final results	55 766	3 248	69 887	
Difference 2019 / 2018	250	-4	603	
Variation 2019 / 2018	0,4%	-0,1%	0,9%	

Annual number of road traffic fatalities in France mainland





1st half 2018: downward trend in all networks.

2nd half 2018: trends split: gain of 125 lives* on rural roads, 17 lives* on other networks.

1st half 2019 : 76 lives* gained on rural roads, but **52 fatalities** more* on other networks.

2nd half 2019 : gain of 130 lives* on rural roads, 10 lives* on other networks = 2nd half 2018.

*compared to the average per half year of the 5 years 2013-2017 (reference)





Fatalities on non-motorway roads outside built-up areas



The number of lives spared is of 349 lives over 20 months

when compared with the average of the same months over the reference period 2013-2017.

Final report on 80kph impact 2019 final data, 2020 estimates

20 July 2020





when compared with the average of the same months over the reference period 2013-2017.





A specific speed observatory to assess the impact of Cerema speed limit reduction on traffic behaviours

- Goals:
 - To collect, process and analyse driving speeds on roads concerned by the 80km/h measure before and after the July, 1st 2018
- The observatory :
 - 50 points chosen on variety of roads (localisation, traffic and uses)
 - Localisations as neutral as possible so road users may be able to drive at their desired speed.
- Associated means :
 - Adapted materials for microscopic measurement of traffic
 - Specialist teams and common procedures to ensure measures quality during both years of monitoring.
- Measurements :
 - Speed measurements collected from June 2018 to December 2019
 - Calculated indicators from data of 143 millions passing vehicles .
- Results :
 - Cars drove 3.5 km/h slower in average
 - Trucks drove 1.8 km/h slower in average
 - No change regarding vehicle platoons





• Since then, the mean speed increased back up to +1 km/h, and decreased back -3,9 km/h in December 2019 for light vehicles, and -2,2 km/h for HGVs.







speed observatory is composed of 50 locations far away from speed radars, where traffic is free to flow.

- The whole driving speed distribution has moved to the left and narrowed, which means a decrease in driving speeds.
- The diagram curves of distributions between September and November 2018 are similar, which means a stability in drivers behaviours once the measure is in place.

Since then, speed distributions have moved only slightly to the right ; the 80 km/h measure remains efficient.





France from 90 to 80km/h

Lowering the speed limit reduces mean speeds,

But speed limits do not effect behaviours the same way in both countries

Distributions des vitesses des VL Juin / septembre, octobre, novembre 2018 6% 80 5% Juin (VMA: 90 km/h) 90 4% Septembre (VMA : 80 km/h) Octobre (VMA : 80 km/h) 3% Novembre (VMA: 80 km/h) 2% 1% 0% 50 60 70 80 90 100 110 120 130 km/h

20 July 2020 Final report on 80kph impact 2019 final data, 2020 estimates

England 97km/h



Single Carriageways





In December 2019, 58% of car drivers still drive over 80 km/h.

35% of car drivers drive between 80 and 90 km/h, 23% drive over 90 km/h







The share of vehicles which drive with low or very low time gaps (< 2 sec or < 1 sec) remain stable before and after the speed limit reduction :

- ightarrow 25% of Light veh (VL) and 6% of HGV (PL) with a time gap under 2 seconds
- \rightarrow 7% of Light veh and 1% of HGV with a time gap under 1 second

In proportion,

HGVs do not drive closer to other vehicles since the 1st July 2018.

The measure had **no impact on the generation of platooning**. The majority of platoons are made up **exclusively of light vehicles**.

July 2020 Final report on 80kph impact 2019 final data, 2020 estimates









A sample of 298 itineraries with a 25-30 km length was selected across the whole mainland counties. Each one was composed of at least 70% single carriageway rural roads.

Study with Google maps API.

During the week:

- 8h, 17h
- 10h-15h

On Saturday:

- 15h.



Location of the 298 itineraries that were studied for their travel time before/after the implementation of the speed limit reduction with Google Maps API.





- On average, a trip duration extended by one second per kilometer
- For 19% of itineraries, the trip duration was shortened.
- 52% of itineraries showed a time loss under 2 seconds per kilometer
- 15 % showed a time loss greater than 3 sec/km.







User survey before/after implementation of the 80 km A Cerema speed limit

 Survey end of April 2018, 5,310 respondents aged 18 +, representative of the French population

84 % use car as main travel mode on that network

30% are in favour of the measure, 40% against it.

77% intended to comply always or nearly always with 80 km/h.

Reason for not complying very often is that "they like and want to drive fast". Time delay is rarely quoted.

After

Before

• 3 surveys : March 2019, October 2019, June 2020 with 3,800 respondents, comparable to those of the « before » survey

48% are now in favour of the measure (53% of women, 44% of men) While 40% were totally opposed to the measure, they are now only 20%.

Even among respondents the most opposed to the 80 km/h, they estimate their additional travel time to be at worst between 2 and 5 minutes.

20 Julv 2020 Final report on 80kph impact 2019 final data, 2020 estimates









Cerema bservatoire national interministérie Women agree more often with the new measure than men *DISR* 100 % 10,2 % 11,2 % 13,3 % 14.0 % 14,8 % 15,7 9 17,4 % 19,6 % 90 % 80 % 70 % 60 % 28.3 31,3 50 % 33,5 32,7 30,7 40 % 36,7 37,1 % 33,3 % 30 % 44,0 20 % 36,1 % 31,0 % 30,9 % 25,2 % 20,2 % 10 % 16,2 % 13,5 % 0% Women Women Women Men Men Men Women Men **BEFORE** AFTER AFTER April 2018 March October 2019 June 2020 Rather against Absolutely in favor Totally against Rather in favor





This study was based on models currently available concerning air pollutants and published in April 2018 (before implementation of the measure).

It is expected that the speed limit reduction will :

- reduce greenhouse gases (CO2) by 3% at most
- reduce pollutants harmful for our health (Nitrogen oxide and fine particles) by 7% at most. This would benefit the population living within 50m from rural roads.

The gain decreases as HGV traffic share increases.

20 July 2020 Final report on 80kph impact 2019 final data, 2020 estimates Reduction in air pollutant emissions, according to the share in HGV traffic, as a result of the reduction of the speed limit to 80 km/h





Annex Tables

Base 100 : development of gliding 12 months fatalities 2016-2020 per network type : nonmotorway network outside urban areas vs remaining network (urban areas and motorways)



Fatalities on single carriageway roads outside built-up areas (not including motorway)

	BAAC						ВА	BAAC données provisoires (estimation ONISR)				
	2013	2014	2015	2016	2017	moyenne 2013-2017	2018	Ecart à la moyenne	2019	Ecart à la moyenne	2020	Ecart à la moyenne
Janvier	158	147	158	144	141	150	138	-12	133	-17	156	6
Février	139	143	142	167	129	144	121	-23	142	-2	120	-24
Mars	133	158	138	168	164	152	156	4	158	6	91	-61
Avril	149	158	160	149	173	158	178	20	134	-24	65	-93
Mai	122	160	170	184	192	166	170	4	146	-20	135	-31
Juin	188	207	186	179	208	194	193	-1	174	-20	ND	
Total premier semestre	889	973	954	991	1007	963	956	-7	887	-76	ND	
Juillet	222	201	221	230	220	219	202	-17	209	-10	ND	
Août	212	205	205	197	190	202	159	-43	175	-27	ND	
Septembre	196	196	165	212	188	191	194	3	187	-4	ND	
Octobre	193	222	250	210	206	216	155	-61	165	-51	ND	
Novembre	163	171	186	149	182	170	176	6	161	-9	ND	
Décembre	203	184	194	200	168	190	177	-13	161	-29	ND	
Total second semestre	1189	1179	1221	1198	1154	1188	1063	-125	1058	-130	ND	
TOTAL ANNUEL	2078	2152	2175	2189	2161	2151	2019	-132	1945	-206	ND	

Tableau 28 - Nombre de tués mensuels sur le réseau considéré, par année - Source : BAAC officiel pour 2013-2019 – ONISRdonnées estimées pour 2020

20 July 2020 **Final report on 80kph impact** 2019 final data, 2020 estimates



Fatalities for the remaining road network.



Tableau 29 - Nombre de tués mensuels sur le reste du réseau, par année - Source : BAAC officiel pour 2013-2019 – ONISRdonnées estimées pour 2020

20 July 2020 **Final report on 80kph impact** 2019 final data, 2020 estimates

oservatoire national interministérie



Cerema
