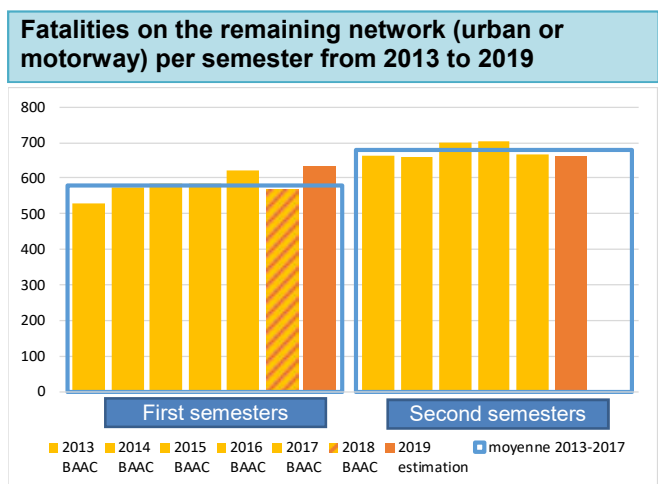
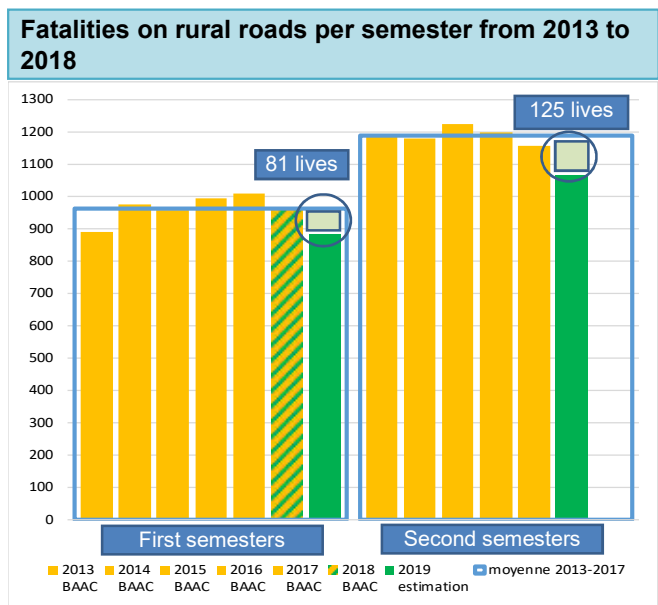
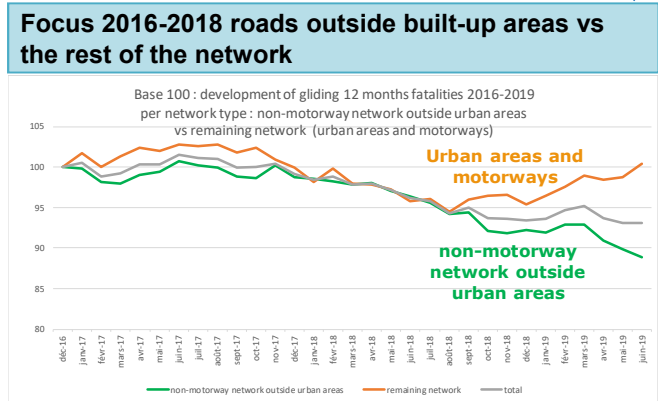
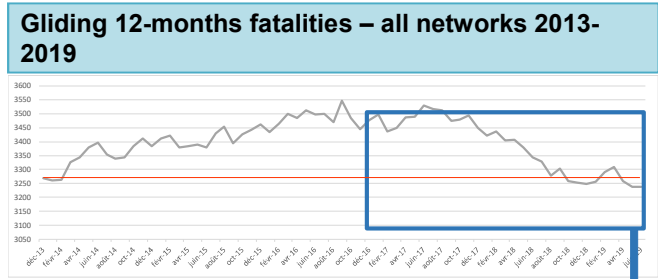


Provisional 12 months evaluation of the speed limit reduction from 90 km/h to 80 km/h on all rural roads without a central reservation.



The French Road Safety Directorate has entrusted Cerema to undertake with Ifstar and the French Road Safety Observatory the evaluation of the speed-limit reduction to 80 km/h on all single carriageway roads outside built-up areas. The report after 12 months is : **Abaissement de la vitesse maximale autorisée à 80 km/h – Evaluation 12 mois, Cerema juillet 2019.**

As last January, fatality results on non-motorway roads outside urban areas are compared to that of the remaining network, urban areas and motorways (from ONISR : 2018 final results, 2019 estimates).

The focus 2016-2018 on mortality trends by network shows that mortality is decreasing on all networks from end 2017 to mid-2018, but only on the network outside urban areas since summer 2018.

Accidents outside built-up areas

Roads outside built-up areas without a central reservation contribute to 90% of rural roads fatalities.

On the 1st semester 2018, mortality on non-motorway roads outside built-up areas is equivalent to the 1st semesters average from 2013 to 2017 (blue line) with 7 fewer deaths, while the first semester 2019 has 81 fewer deaths (-8.4%). The 2nd semester 2018 recorded 125 fewer fatalities (-10.5%) compared to the 2nd semesters average 2013-2017.

Road fatalities on remaining network

In the 1st sem. 2018, mortality on motorways and built-up areas was close to average (-11 deaths), while 54 more people died in the 1st sem. 2019. Mortality in the 2nd sem. 2018 was close to average (-17 deaths).

Impact of the 80 km/h measure

Over 1 year, compared to the 2013-2017 average, 206 lives are spared on the non-motorway network outside built-up areas, while the remaining network shows 37 more deaths.

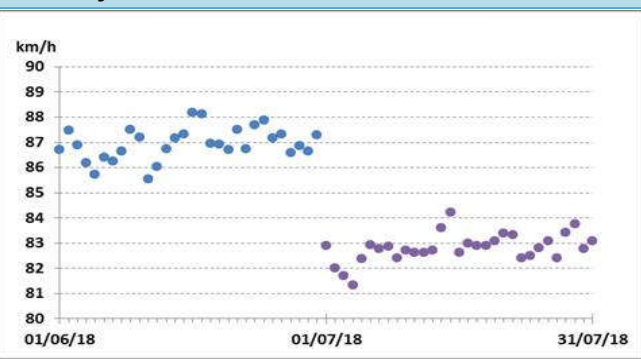
If the non-motorway network outside built-up had followed the same trend as the remaining network, 270 more deaths would have been recorded (206+64).

Since November, the beginning of fixed radar vandalism, speeds on two-way roads have increased by an average of 1 km/h. The conditions for the effectiveness of measure 80 have changed. The missed opportunity to spare lives can be estimated in two ways:

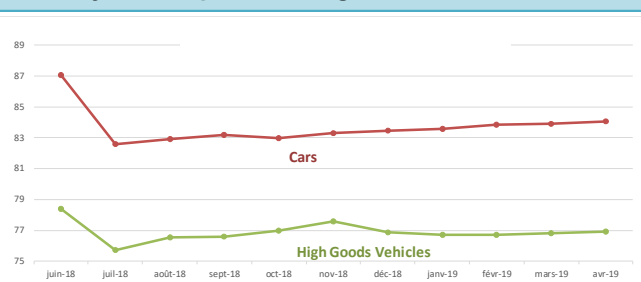
– either on the basis of the first 4 months gain (July-Oct. 2018) compared to average of 2013-2017 same months (30 lives/month). The next 8 months only gain 11 lives/month : the missed opportunity would then be of 150 lives.

- or on the basis of the gradual speed increase of +1 km/h, ¼ of the initial speed decrease, by reconstructing the gain lost from the expected gain (1/7 of 70 lives gained Nov-April 2019, 1/3 of 90 lives gained May-June). The missed opportunity would only be of 40 lives.

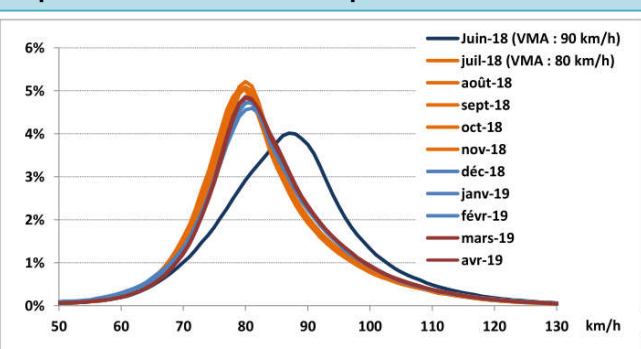
Daily speed monitoring for light vehicles in June and July 2018



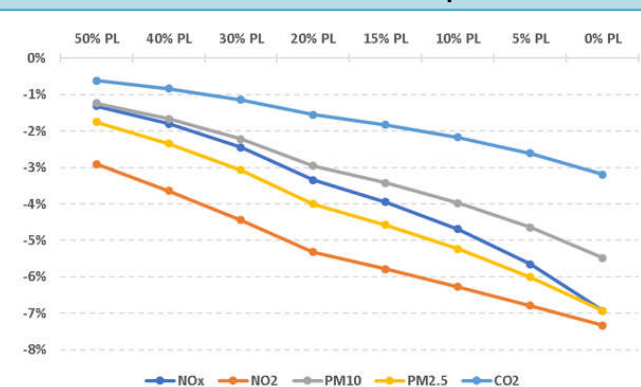
Monthly mean speeds for light vehicles and HGV



Actual speeds distribution before/after the implementation of the new speed limit of 80 km/h



Modelling for potential reduction in atmospheric pollutants emissions due to the speed limit reduction to 80 km/h – ATMO ARA April 2018



<https://www.atmo-auvergnerhonealpes.fr/actualite/abaissement-de-la-vitesse-80-kmh-et-impact-sur-les-emissions-polluantes>

Monitoring of actual speeds

In May 2018, 50 speed indicators were installed permanently on different spots outside built-up areas on two lane roads without a central reservation. They measure actual speeds in both directions. Speeds of 81 million vehicles were recorded.

Cars average actual speeds dropped from the very first day, on Sunday 1st July 2018. Between June and September the mean speed reduction was – 3.9 km/h. But since November the speed has increased by +1 km/h and stands at -3 km/h compared to June 2018.

The speed limit reduction does not concern trucks, which are already limited at 80 km/h. Nevertheless, their actual speeds have fallen by -1.5 km/h since June 2018. Time intervals between vehicles are unchanged.

Recording of journey time

Journey time was measured with Google maps API on a sample of 298 itineraries before and after the measure entered into force. These 25 to 30 km length itineraries were selected all over France mainland, with a minimum of 70% single carriageway roads.

Results show an average delay on the journey of one second per kilometer from the 1st July 2018. However on 34% of the itineraries, journey time was shortened.

Road users perception before/after

Two waves of surveys were conducted before (24/04-02/05/2018) and after (07/03-14/03/2019) among 5,310 and 3,800 respondents aged 18 and over, representative of the French population. 84% of respondents mainly use the car on the target network.

40% of the respondents are now in favour of the measure (30% before); 25% are still against it (40% before). 76% of respondents report that they most often comply with the new limitation (more than according to the field observations).

Those most opposed to the measure say they lose at worst between 2 and 5 min on a journey (less than estimated before - 5-10 min -, but more than above - 1s/km).

Before measure estimate of the impact on the air pollutants

ATMO study Auvergne-Rhône Alpes, April 2018

For greenhouse gases, there could be a 3% decrease in CO2 emissions.

People living within 50 m of road traffic under 30,000 vehicles/day breathe NOx and fine particles vehicle emissions. Car emissions are reduced around the optimal 70 km/h ; NOx emissions could be reduced by up to 7%.

HGV emissions increase with every 90 km/h deviation, yet the measure has limited effect on trucks traffic speeds.

Road traffic fatalities on non-motorway roads outside built-up areas in France mainland

Single carriageway roads contribute to 90% of fatalities

	2013 BAAC	2014 BAAC	2015 BAAC	2016 BAAC	2017 BAAC	average 2013-2017	2018 BAAC	2018 variation to average	2019 estimate	2019 variation to average
January	158	147	158	144	141	150	138	-12	131	-19
February	139	143	142	167	129	144	121	-23	143	-1
March	133	158	138	168	164	152	156	4	157	5
April	149	158	160	149	173	158	178	20	134	-24
May	122	160	170	184	192	166	170	4	146	-20
June	188	207	186	179	208	194	193	-1	171	-23
First semesters	889	973	954	991	1007	963	956	-7	882	-81
July	222	201	221	230	220	219	202	-17		
August	212	205	205	197	190	202	159	-43		
September	196	196	165	212	188	191	194	3		
October	193	222	250	210	206	216	155	-61		
November	163	171	186	149	182	170	176	6		
December	203	184	194	200	168	190	177	-13		
Second semesters	1 189	1 179	1 221	1 198	1 154	1 188	1 063	-125		
Annual Total	2 078	2 152	2 175	2 189	2 161	2 151	2 019	-132		

2018 final results (source : BAAC file) ; 2019 estimates (source : ONISR on the basis of uncomplete first BAAC files)

Road fatalities on the remaining network in France mainland

Built-up areas and motorways

	2013 BAAC	2014 BAAC	2015 BAAC	2016 BAAC	2017 BAAC	average 2013-2017	2018 BAAC	2018 variation to average	2019 estimate	2019 variation to average
January	85	88	104	92	114	97	91	-6	105	8
February	82	82	93	96	75	86	97	11	111	25
March	67	103	81	87	103	88	79	-9	96	8
April	87	96	98	94	108	97	106	9	100	3
May	102	100	97	110	105	103	98	-5	102	-1
June	105	104	113	106	116	109	97	-12	119	10
First semesters	528	573	586	585	621	579	568	-11	633	54
July	122	101	132	126	123	121	126	5		
August	110	101	127	104	107	110	87	-23		
September	116	121	92	122	109	112	128	16		
October	115	125	128	105	113	117	119	2		
November	89	109	110	109	90	101	92	-9		
December	110	102	111	137	124	117	109	-8		
Second semesters	662	659	700	703	666	678	661	-17		
Annual Total	1 190	1 232	1 286	1 288	1 287	1 257	1 229	-28		

2018 final results (source : BAAC file) ; 2019 estimates (source : ONISR on the basis of uncomplete first BAAC files)

Estimate of 12 months impact on non-motorway network outside built-up areas if we imagine what could have been mortality on these roads should they have followed the same trend as the remaining network

	Outside built up areas last 12 months fatalities	Other networks last 12 months fatalities	Total France mainland last 12 months fatalities	Outside built up areas estimate if other networks trend	Expected gain to date
2013-2017 average	2151	1257	3408		
June 2018	2 110	1 234	3 344	2 112	2
July 2018	2 092	1 237	3 329	2 117	25
August 2018	2 061	1 217	3 278	2 083	22
September 2018	2 067	1 236	3 303	2 115	48
October 2018	2 016	1 242	3 258	2 125	109
November 2018	2 010	1 244	3 254	2 129	119
December 2018	2 019	1 229	3 248	2 103	84
January 2019	2 012	1 243	3 255	2 127	115
February 2019	2 034	1 257	3 291	2 151	117
March 2019	2 035	1 274	3 309	2 180	145
April 2019	1 991	1 268	3 259	2 170	179
May 2019	1 967	1 272	3 239	2 177	210
1 year estimate : June 2019	1 945	1 294	3 239	2 214	269

the trend was the same for all networks before 1st July 2018