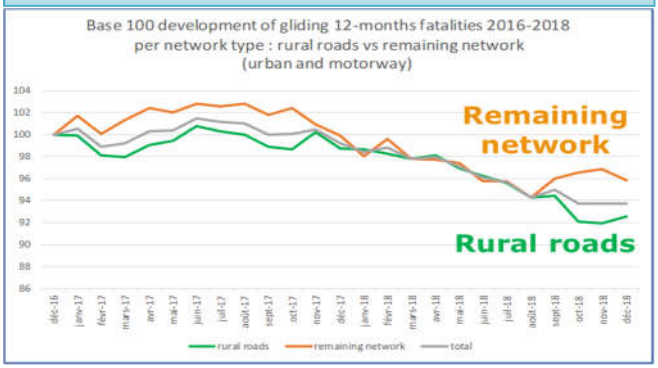
First interim assessment of the speed limit reduction from 90 km/h to 80 km/h on all rural roads without a central reservation.

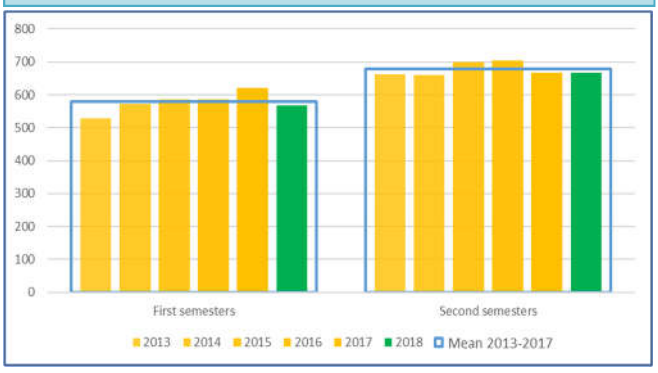
Gliding 12-months fatalities – all networks 2013-2018

Focus 2016-2018 rural roads vs rest of the network



Fatalities on rural roads per semester from 2013 to 2018

Fatalities on the remaining network (urban or motorway) per semester from 2013 to 2018



The French Road Safety Directorate has entrusted the Cerema to undertake, along with Ifsttar and the French Road Safety Observatory, the evaluation of the effectiveness of the speed-limit reduction to 80 km/h on all rural single carriageway roads.

The first interim report is : ***Abaissement de la vitesse maximale autorisée à 80 km/h – Evaluation - premiers éléments, Cerema janvier 2019.***

The accident analysis takes place on all roads outside built-up areas that are not motorways, therefore a slightly wider network than the impacted one : dual carriageways, speed limit 110 km/h, and local rural stretches, 70 km/h.

Accidents on no build-up road

Rural roads without a central reservation contribute to 90% of rural roads fatalities.

Charts left show road fatalities on rural roads in France mainland :

- A slight decrease in the 1st semester 2018 (10 saved lives) compared with the average of the first semesters 2013-2017 (5 years).
- A strong decrease in the 2nd semester 2018 (116 saved lives) compared to 13-17.

The saving occurs mainly July-October while fatalities in November/December remain overall stable.

Road accidents on built-up road and motorways - Impact of the measure

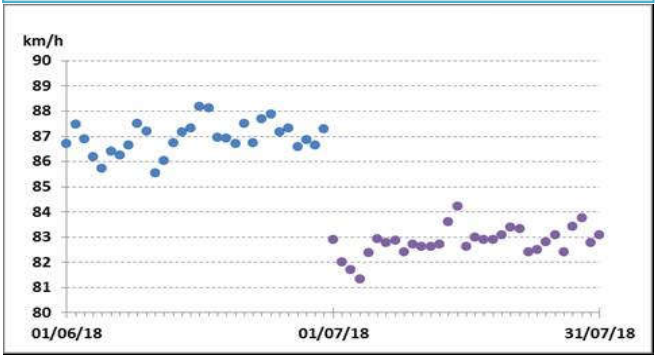
The comparison between fatalities on rural roads and on the remaining network provides objective elements towards the effectiveness of the measure (cf. the evolution of the aggregation in 2016 during the 12 rolling month index base 100). Road fatalities decrease on all roads from end 2017 to mid-2018, but only for the rural roads during the 2nd semester of 2018.

Both rural and the remaining network show a number of fatalities slightly below the average 2013-2017 during the 1st semester 2018, and well below that of the 1st semester 2017.

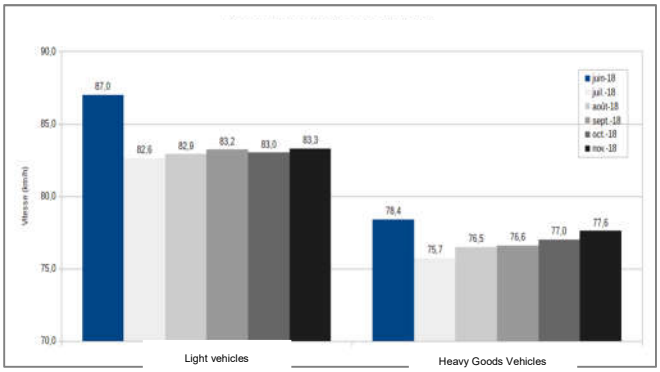
On the other hand, fatalities on the remaining network during the 2nd semester 2018 are equivalent to those of the 2nd semester 2017 and of the average 2013-2017. We can therefore see that users behave differently depending on whether they drive or not on roads targeted by the measure.

Additionally, the month of September 2018 which appeared as a period not favourable for expecting benefits of the measure on rural roads (stable average compared with the mortality of past years) was really devastating (+19 dead) on roads not targeted by the measure.

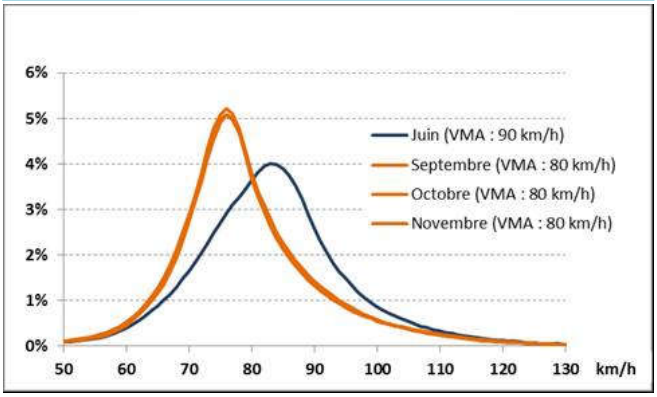
Daily speed monitoring for light vehicles in June and July 2018



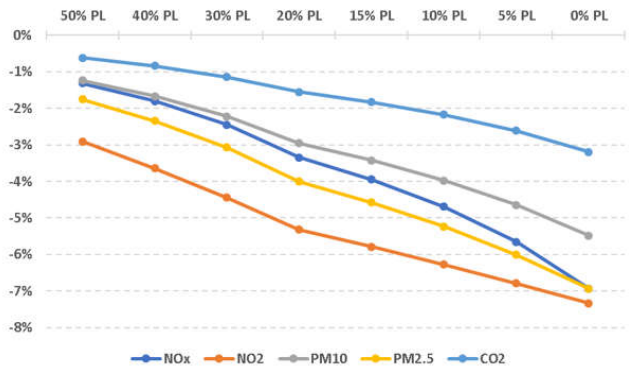
Monthly mean speeds for light vehicles and HGV



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



Modelling for potential reduction in atmostpheric 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

50 speed indicators have been installed permanently since June 2018 on different spots on two lane rural roads without a central reservation. They measure actual speeds in both directions.

The average actual speeds of light vehicles dropped from the very first day of the measure, Sunday 1st July 2018. Between June and September the mean speed reduction was – 3.9 km/h.

The speed limit reduction does not concern trucks as they are already limited at 80 km/h. Nevertheless, their actual speeds have fallen by -1.8, km/h between June and September 2018, but only by -0,8 km/h between June and November 2018.

Recording of journey time

A measure of journey time has been done before and after the measure entered into force on a sample of 298 itineraries with Google maps API. These itineraries were selected across all French mainland counties, with a 25 to 30 km length and a minimum of 70% of rural single carriageway roads.

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

Perception of road users before measure

A survey was undertaken from 24th April to 2nd May 2018 on 5310 respondents aged 18 and more and representative of the French population. The main travel mode used by respondents on the road network was the car (83.7%).

30% of respondents were positive to the measure. Nonetheless, 77% of respondents stated their intention to often respect or always respect the new speed limit.

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 C02 emissions.

Fine particles and nitrogen dioxide are the air pollutants which impact our health, and which are found within 50m from roads with a road traffic lower than 30 000 vehicles per day, as is the case here. Nitrogen Dioxide emissions by light-vehicle are reduced when the actual speed approaches 70km/h. At best, there could be a 7% decrease of nitrogen dioxide with the 80Km/h measure.

Nitrogen oxide emissions by trucks increase as you move further from 90km/h, yet the effect of the measure on trucks traffic speed is limited.

Road traffic fatalities on rural roads in France mainland

Single carriageway roads, where 80 km/h apply, contribute towards 90% of rural roads fatalities.

	2013 BAAC	2014 BAAC	2015 BAAC	2016 BAAC	2017 BAAC	mean 2013-2017	2018 estimates	difference 2018-mean
January	158	147	158	144	141	150	*140*	*-10*
February	139	143	142	167	129	144	*120*	*-24*
March	133	158	138	168	164	152	*154*	*2*
April	149	158	160	149	173	158	*179*	*21*
May	122	160	170	184	192	166	*167*	*1*
June	188	207	186	179	208	194	*193*	*-1*
Total 1st semester	**889**	**973**	**954**	**991**	**1007**	**963**	***953***	***-10***
July	222	201	221	230	220	219	*206*	*-13*
August	212	205	205	197	190	202	*160*	*-42*
September	196	196	165	212	188	191	*192*	*1*
October	193	222	250	210	206	216	*155*	*-61*
July-October	**823**	**824**	**841**	**849**	**804**	**828**	***713***	***-115***
November	163	171	186	149	182	170	*178*	*8*
December	203	184	194	200	168	190	*181*	*-9*
November-December	**366**	**355**	**380**	**349**	**350**	**360**	***359***	***-1***
Total 2nd semester	**1189**	**1179**	**1221**	**1198**	**1154**	**1188**	***1072***	***-116***
Annual Total	**2078**	**2152**	**2175**	**2189**	**2161**	**2151**	***2025***	***-126***

2018 estimates : ONISR 24/01/2019

Sources : BAAC Road traffic accident database, BAAC provisional and fast track local feedback

Road traffic fatalities on the remaining networks in France mainland

Urban streets and motorways

	2013 BAAC	2014 BAAC	2015 BAAC	2016 BAAC	2017 BAAC	mean 2013-2017	2018 estimates	difference 2018-mean
January	85	88	104	92	114	97	*89*	*-8*
February	82	82	93	96	75	86	*96*	*10*
March	67	103	81	87	103	88	*79*	*-9*
April	87	96	98	94	108	97	*107*	*10*
May	102	100	97	110	105	103	*101*	*-2*
June	105	104	113	106	116	109	*95*	*-14*
Total 1st semester	**528**	**573**	**586**	**585**	**621**	**579**	***567***	***-12***
July	122	101	132	126	123	121	*123*	*2*
August	110	101	127	104	107	110	*88*	*-22*
September	116	121	92	122	109	112	*131*	*19*
October	115	125	128	105	113	117	*120*	*3*
November	89	109	110	109	90	101	*94*	*-7*
December	110	102	111	137	124	117	*111*	*-6*
Total 2nd semester	**662**	**659**	**700**	**703**	**666**	**678**	***667***	***-11***
Annual Total	**1190**	**1232**	**1286**	**1288**	**1287**	**1257**	***1234***	***-23***

2018 estimates : ONISR 24/01/2019

Sources : BAAC Road traffic accident database, BAAC provisional and fast track local feedback