

1st interim report on the impact of the speed limit reduction to 80 km/h on single carriageway rural roads

Road traffic accidents 2018 provisional results by ONISR
28/01/2019

French Road Safety
Observatory

28 January 2019
1st report 80kph-2018 provisional

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

Cerema task force is working on:

- A « coordination » task led by Marine Millot (*Cerema Méditerranée*) and Georges Tempez (*Cerema Transport infrastructures and Materials*) ;
- 4 specific topics:
 - « Speed monitoring» led by Cerema Normandie-Centre ;
 - « Accident analysis» led by Cerema Sud-Ouest ;
 - « Cultural changes» led by Cerema Ouest ;
 - « Societal effects» led by Cerema Méditerranée.

Road traffic accidents - provisional 2018- France mainland

Road fatalities have decreased by -5,5 % between 2017 and 2018 with 189 fewer deaths

France mainland

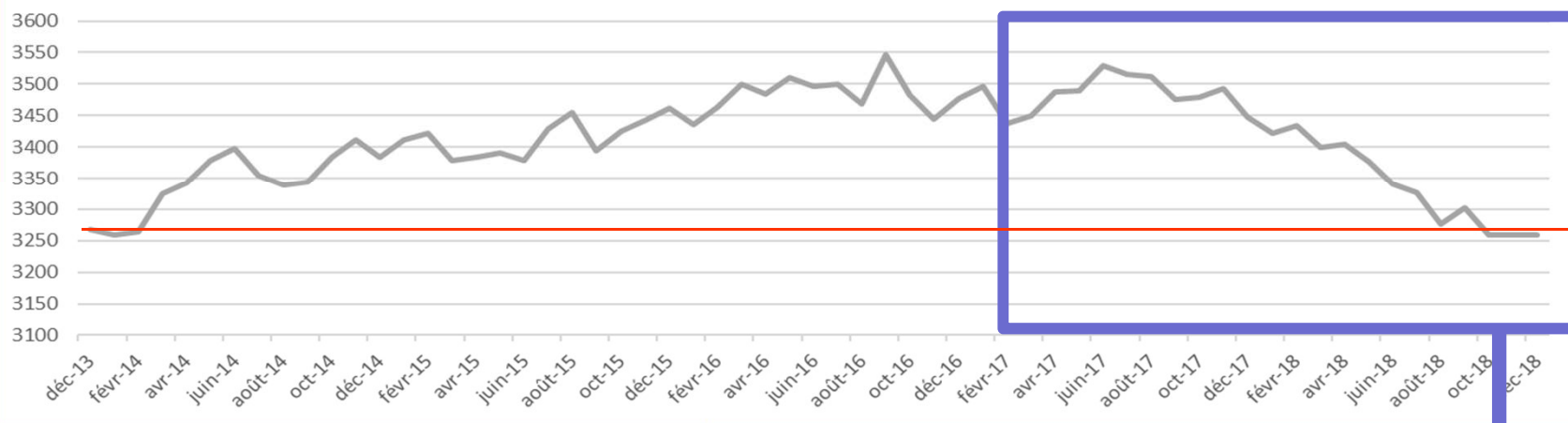
Results for the year 2018	Injury accidents	Killed within 30 days	Injured people	incl hospitalised 24h
2018 estimates	55 800	3 259	69 434	20 864
2017 final results	58 613	3 448	73 384	27 732
Difference 2018 / 2017	-2 813	-189	-3 950	-6 868
Variation 2018 / 2017	-4,8%	-5,5%	-5,4%	-24,8%

3 259 persons died on the roads of France mainland in 2018, **189 fewer** than in 2017. Road fatalities show a decrease of -5,5 %, and drop for the first time below the 2013 best year to date (3 268 killed).

Since 2010, road fatalities have decreased by **-18,4 %**, **with 733 lives saved in 2018 compared to 2010.**

Road traffic fatalities over a rolling 12 months period

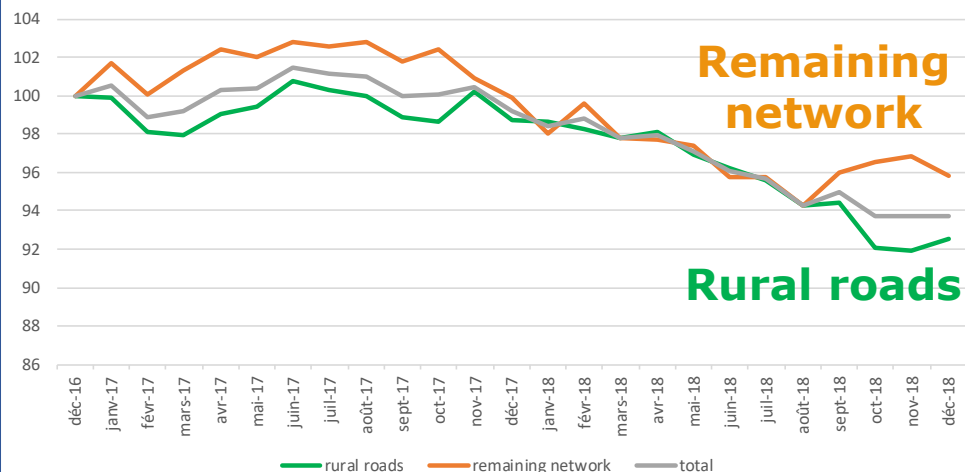
Gliding 12- months fatalities 2013-2018 in France mainland



The falling trend initiated in the third quarter of 2017 was first a decrease due to the « remaining network» (urban streets and motorways), then for all networks during the 1st semester 2018.

In the second semester 2018, only rural roads fatalities decrease while road fatalities from the remaining network rise.

Base 100 development of gliding 12-months fatalities 2016-2018
per network type : rural roads vs remaining network
(urban and motorway)



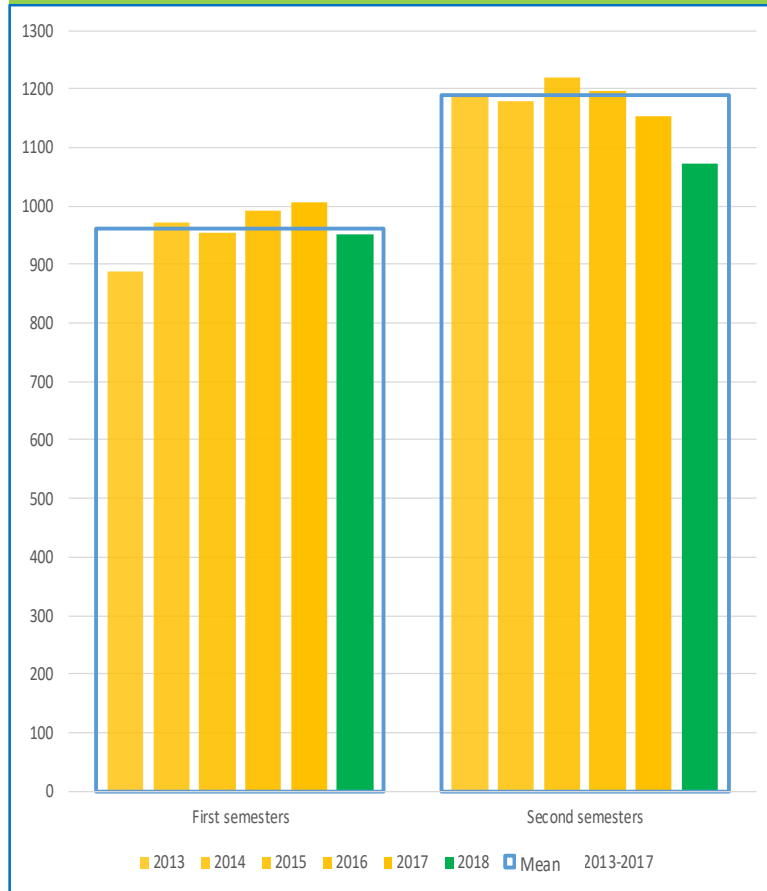
Changes in the number of road fatalities according to the road networks

	Motorways	Rural roads	Urban streets	Total
2000	584 7%	5310 65%	2276 28%	8 170 100%
2010	256 6%	2603 65%	1133 28%	3 992 100%
2013	261 8%	2078 64%	929 28%	3 268 100%
2017	282 8%	2161 63%	1005 29%	3 448 100%
2018 prov	273 8%	2025 62%	961 29%	3 259 100%
Variation 2017 - 2018	-3%	-6%	-4%	-5,5%
Variation 2013-2018	5%	-3%	3%	-0,3%
Variation 2010-2018	7%	-22%	-15%	-18,4%
Variation 2000-2018	-53%	-62%	-58%	-60,1%

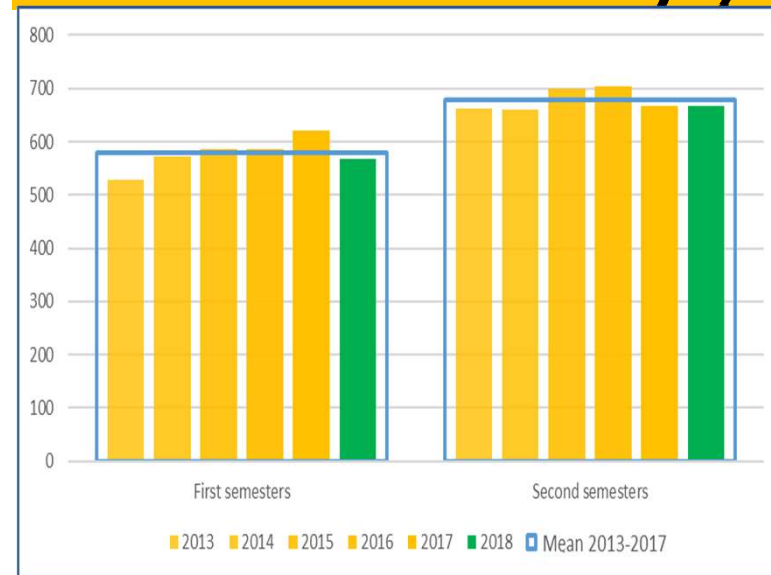
Rural roads are the only network with a life gain compared to 2013.

Comparison between 2013-2018 semesters on road networks

Rural roads

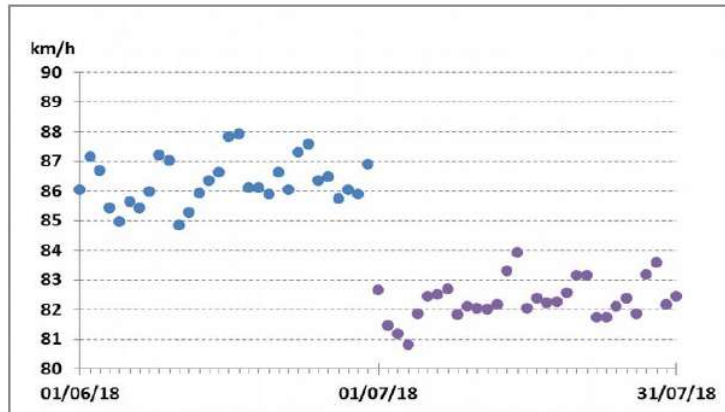


Remaining network (urban streets and motorways)



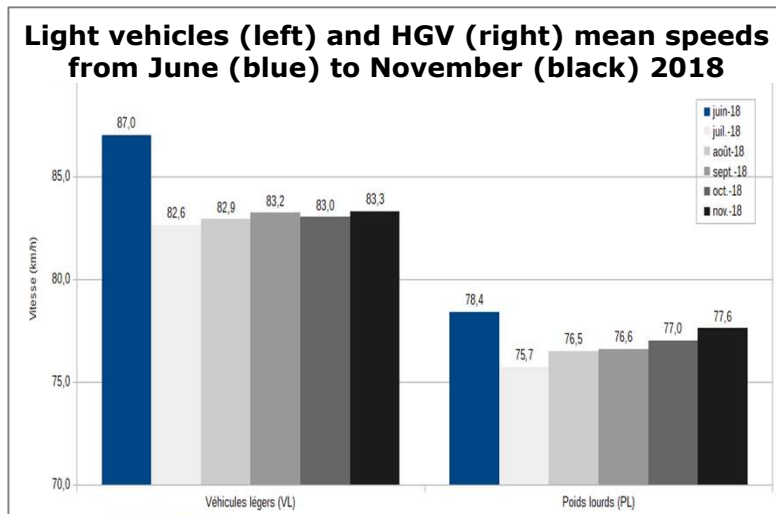
- Goals:
 - To collect, process and analyse driving speeds on roads concerned by the 80km/h measure before and after the July, 1st 2018
- The observatory :
 - 50 points chosen on variety of roads (localisation, traffic and uses)
 - Localisations as neutral as possible so road users may be able to drive 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.
- First results :
 - Speed measurements collected from June to November 2018
 - Calculated indicators from data of **44 millions passing vehicles** .

Average speed changes before and after (June to November 2018)



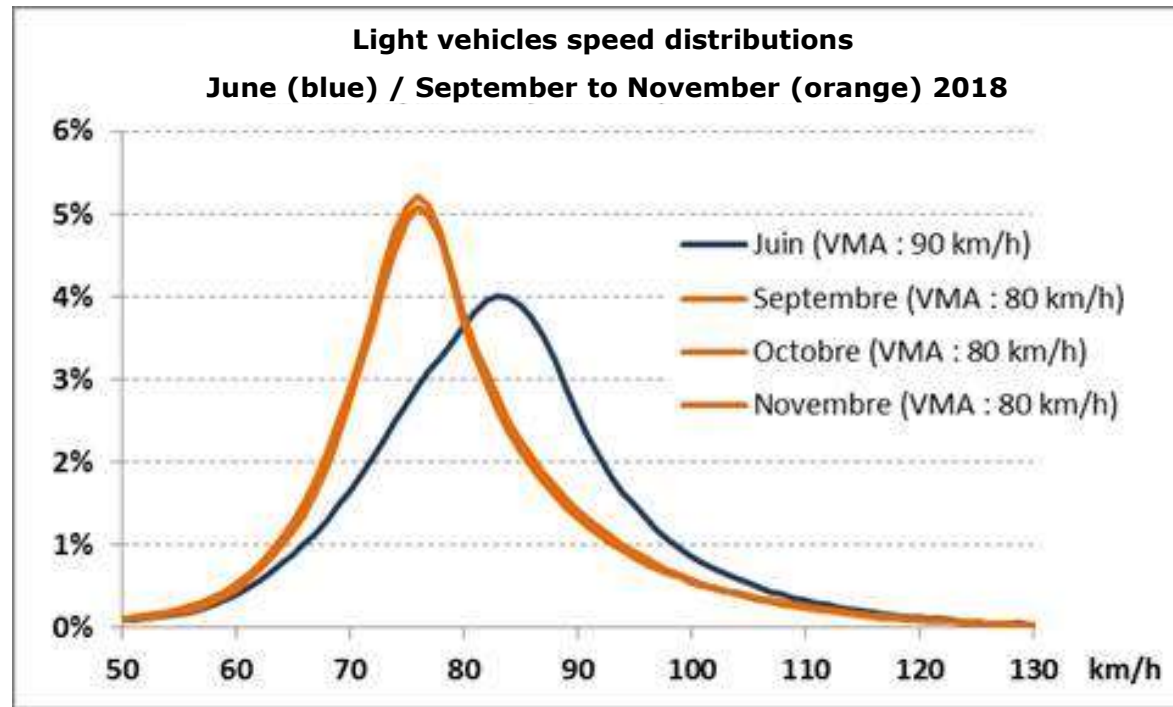
Daily average speeds in June (before) and July (after) 2018 on the network impacted by the 80 km/h on 1st July

- A sudden drop of light vehicles driving speeds from the very 1st July 2018, although it was a Sunday



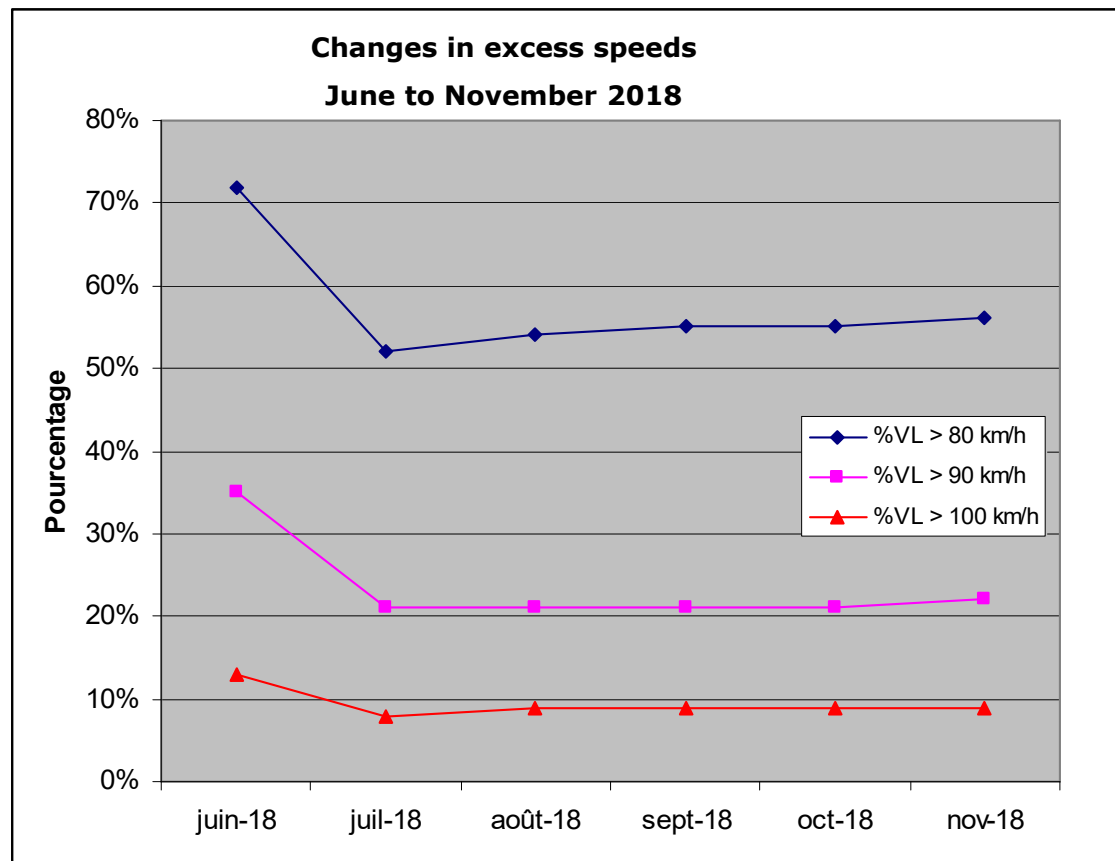
- The decrease on average driving speeds for light vehicle and heavy goods vehicles :
 → -3.9 km/h for LV between June and September
 → -1.8 km/h for HGV between June and September
- A stability on driving speeds between July and November 2018 for light vehicles. A slight increase for heavy goods vehicles over the months.

Driving speeds changes before/after (June to November 2018)



- 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 are similar, which means a stability in drivers behaviours once the measure is in place.

Driving speeds changes before/after (June to November 2018)



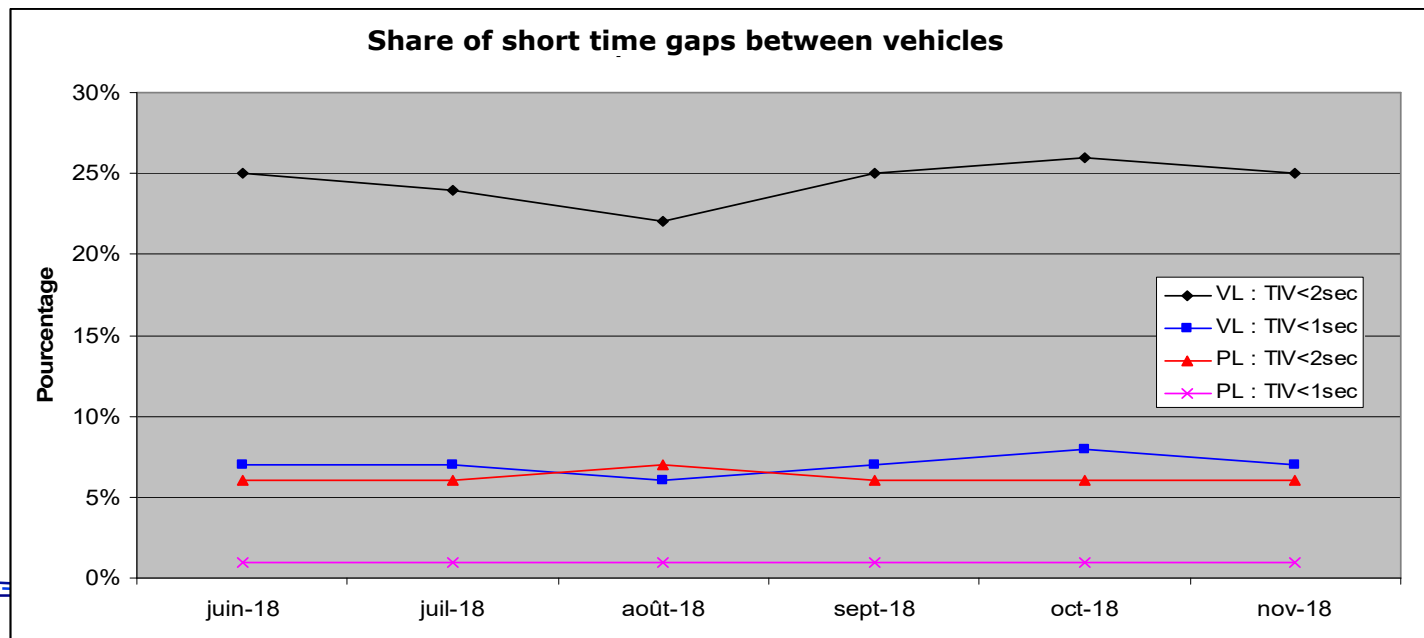
A decrease of the vehicles share that exceeds 80 km/h:

- Despite a decrease, the 55% remaining show that a huge progression margin subsist to approach a better respect of the maximum speed allowed.
- There is a decrease in the share of vehicles exceeding 100 km/h but which stay at a disturbing level (9%)

Time gaps between vehicles before/after (June to November 2018)

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 :

- 25% of Light veh (VL) and 6% of HGV (PL) with a time gap under 2 seconds
- 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.



Journey time follow-up before/after (June to September 2018)

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.

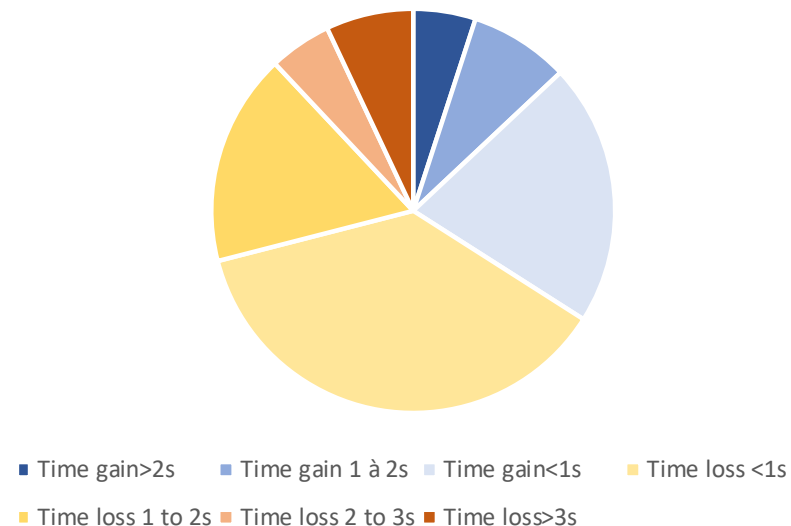


Location of the 298 itineraries that were studied for their travel time before/after the implementation of the speed limit reduction with Google Maps API.

Journey Time follow-up before/after (June to September 2018)

- On average, a trip duration extended by **one second per kilometer**
- **For 34%** of itineraries, the trip duration was shortened.
- 37% of itineraries showed a time loss under 1 second per kilometer
- 12 % showed a time loss greater than 2 sec/km.

Change in trips duration between June and
September 2018 (second/km)



Survey on user feelings about the measure about to be implemented

- A survey was undertaken from 24th April to 2nd May 2018 (before implementation on 1st July) 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 favourable** to the measure.
- Nonetheless, **77% of respondents stated their intention to often respect or always** respect the new speed limit.
- About users stating their intention to sparsely respect the measure, arguments presented concern mainly the fact that they like and want to drive fast. The loss of time is not often mentioned. Arguments are more linked to the constraints imposed by the measure than the loss of time.

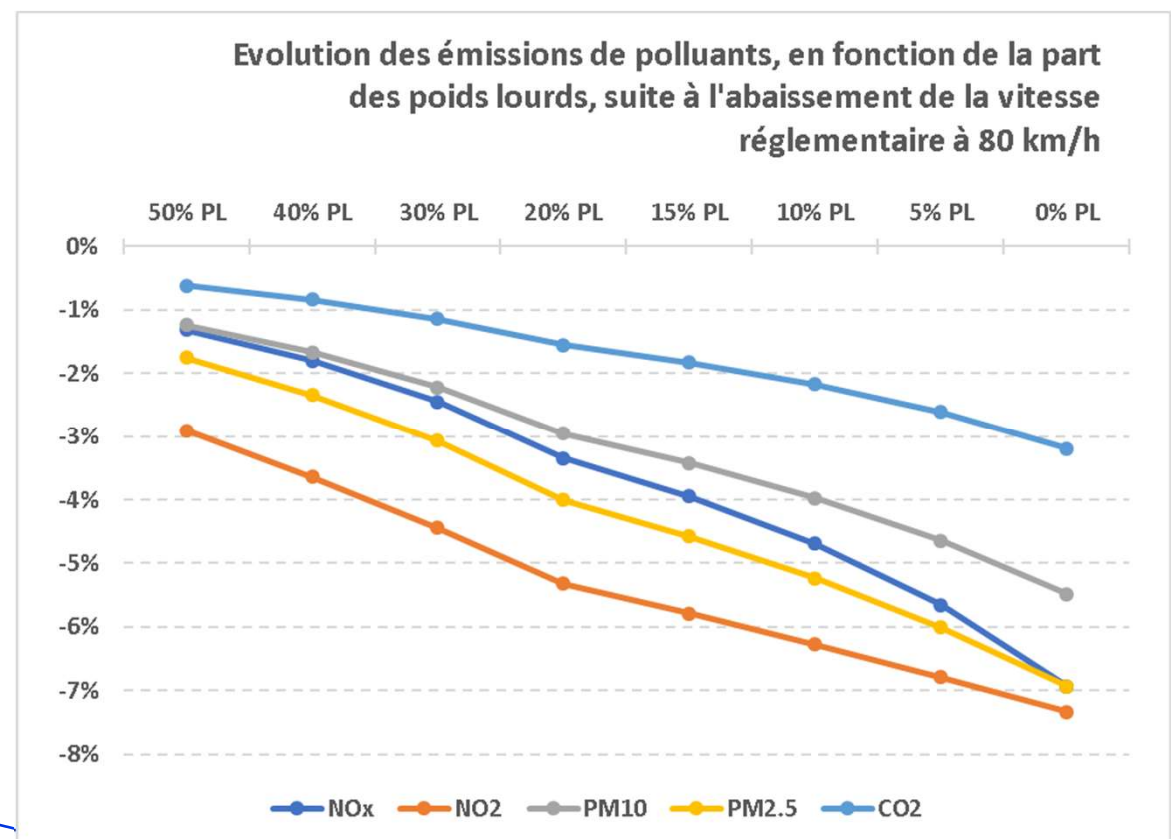
This study was based on models currently available concerning air pollutants and published in April 2018 (before implementation of the measure).

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.

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

Fatalities on single carriageway rural roads (not including motorway)

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

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Fatalities for the remaining road network.

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

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