

Reducing the speed limit on the rural network in France

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Traficverket and ETSC – 23 May 2023

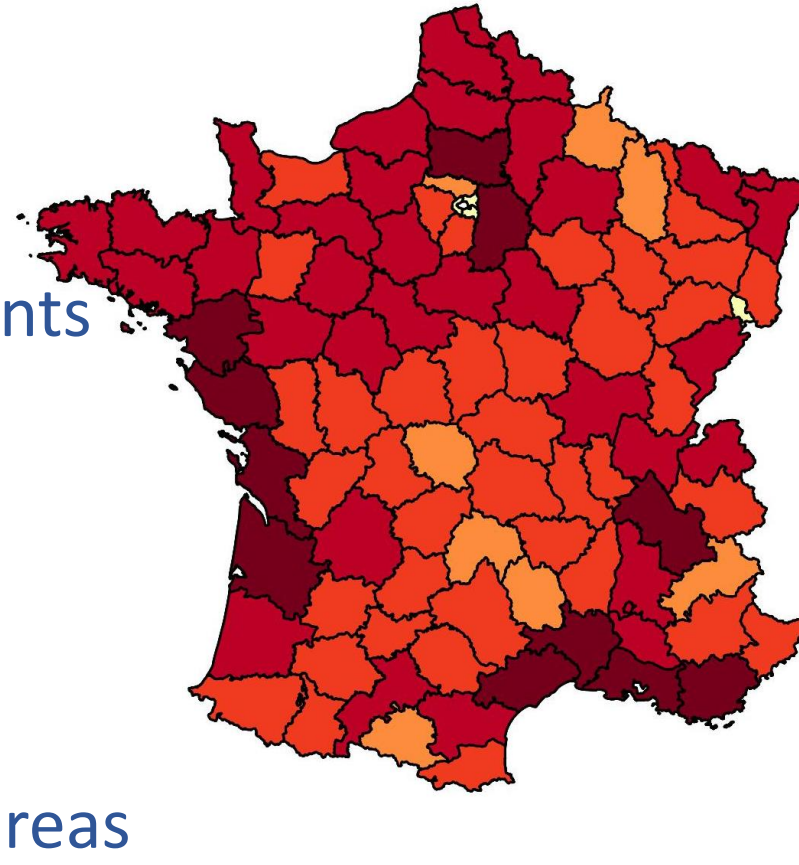
The role of speed in the Safe System



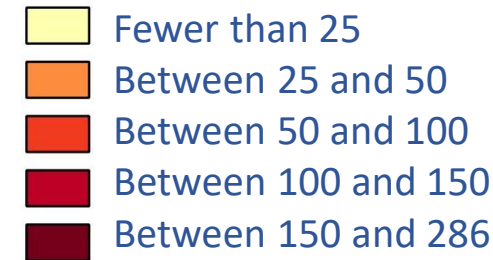
<http://www.securite-routiere.gouv.fr>

France at a glance

- Population : 66 million inhabitants
- Area : 600.000 km²
- Exposure : 606 billion veh.km
- 3 700 RT fatalities in 2017
(incl overseas)
- 80% population lives in urban areas
- 63% RT fatalities on rural network



Fatalities on the rural network
over 5 years (2012-2016)





Political timeline

President François HOLLANDE 2012-2017

November 2012 : 2020 target (to reduce fatalities by 50%) set by Minister of Interior

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

President Emmanuel MACRON 2017-2022

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.

Scientific timeline

2012-2014 : Cerema study on road accidents according to the type of rural network (**2 counties**)

November 2013 : National road safety council **EXPERT COMMITTEE** recommends key measures to meet the target. **300 to 400 lives to be saved per year** with lowering the speed limit on rural roads from 90 to 80 km/h

2013-2015 : Cerema questionnaire to County Councils about traffic and accidents according to the type of rural network (**9 counties** with full reply)

2015-2017 : Cerema traffic observations on experiment

2017 : ETSC *Reducing deaths in single vehicle collisions*

2016-2018 : Socio-eco impact of a 10km/h speed limit reduction on all networks (**Min Transport** eco experts).

Jan-April 2018 : ONISR questionnaire to **100 Prefects** on accidents according to the type of rural network

2018 : IRTAD report on *Speed and crash risk*

Fatalities occur first on the main rural roads (where most traffic is)

On non-motorway roads outside built-up areas :

- 38% of fatalities occur on the first 10% main rural roads
- 55% of fatalities occur on the first 20% main rural roads
- 64% of fatalities occur on the first 30% main rural roads

There must be no exception to the 80 km/h measure !

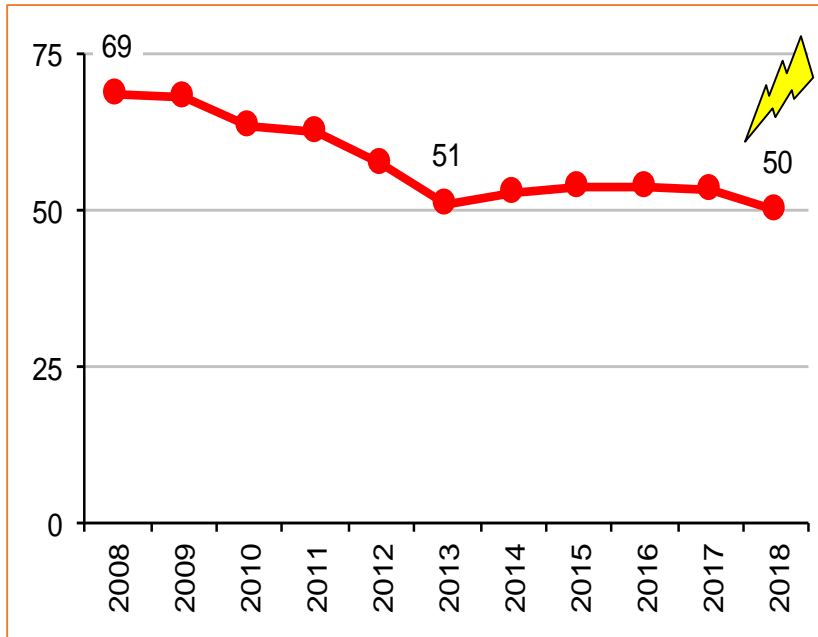
We did make an exception when there were overtaking stretches in 3 or 4 lanes sections but they represented less than 5 000 km (out of more than 400 000km).



- On a mature network, fatalities occur where the traffic flows, therefore on the nice and comfortable roads
- Setting up a reduction target for fatalities implies targetting where the fatalities occur, and not just where roads have the higher risk i.e :
 - Use the number of fatalities (or seriously injured) per km
 - And not the number of fatalities (or seriously injured) per veh.km

Fatality trend against population and traffic (excl.Overseas)

Development of the number of fatalities per million inhabitants over the past 10 years

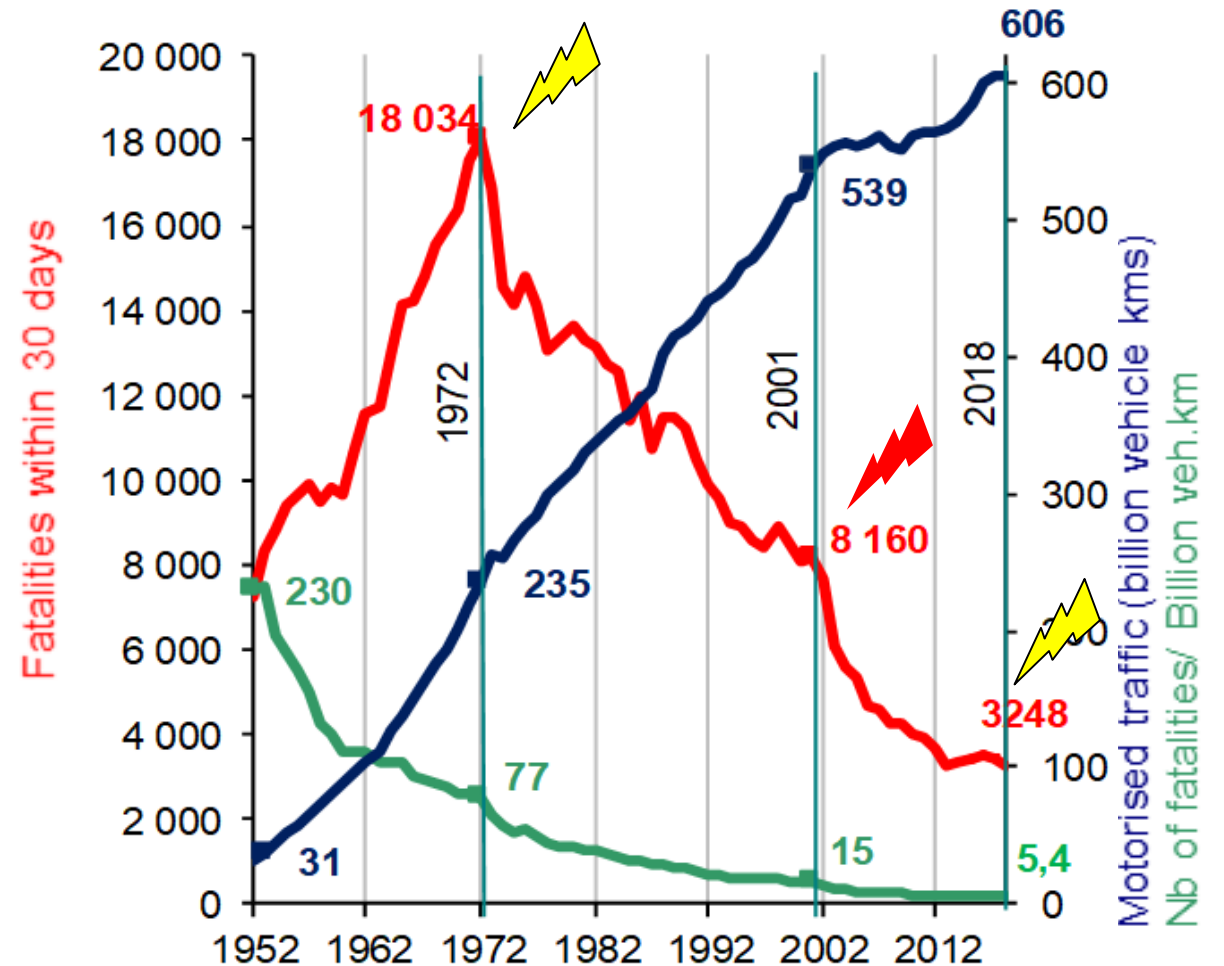


- Setting speed limits up

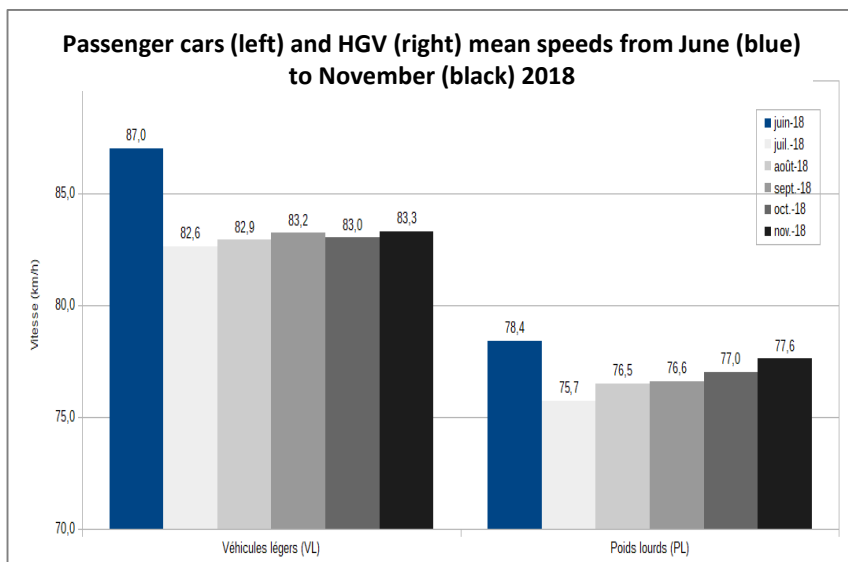
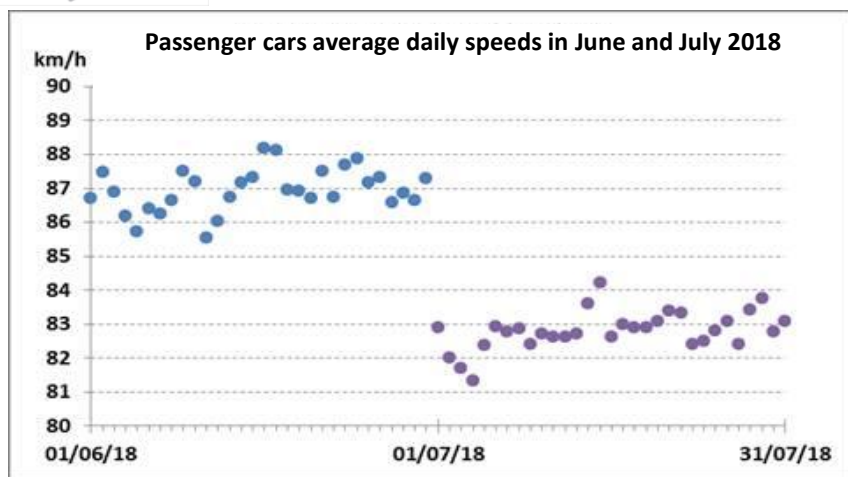


- Implementing automated speed cameras

Fatality trend (red), traffic (blue), and number of fatalities per billion veh.km (green) since 1952



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

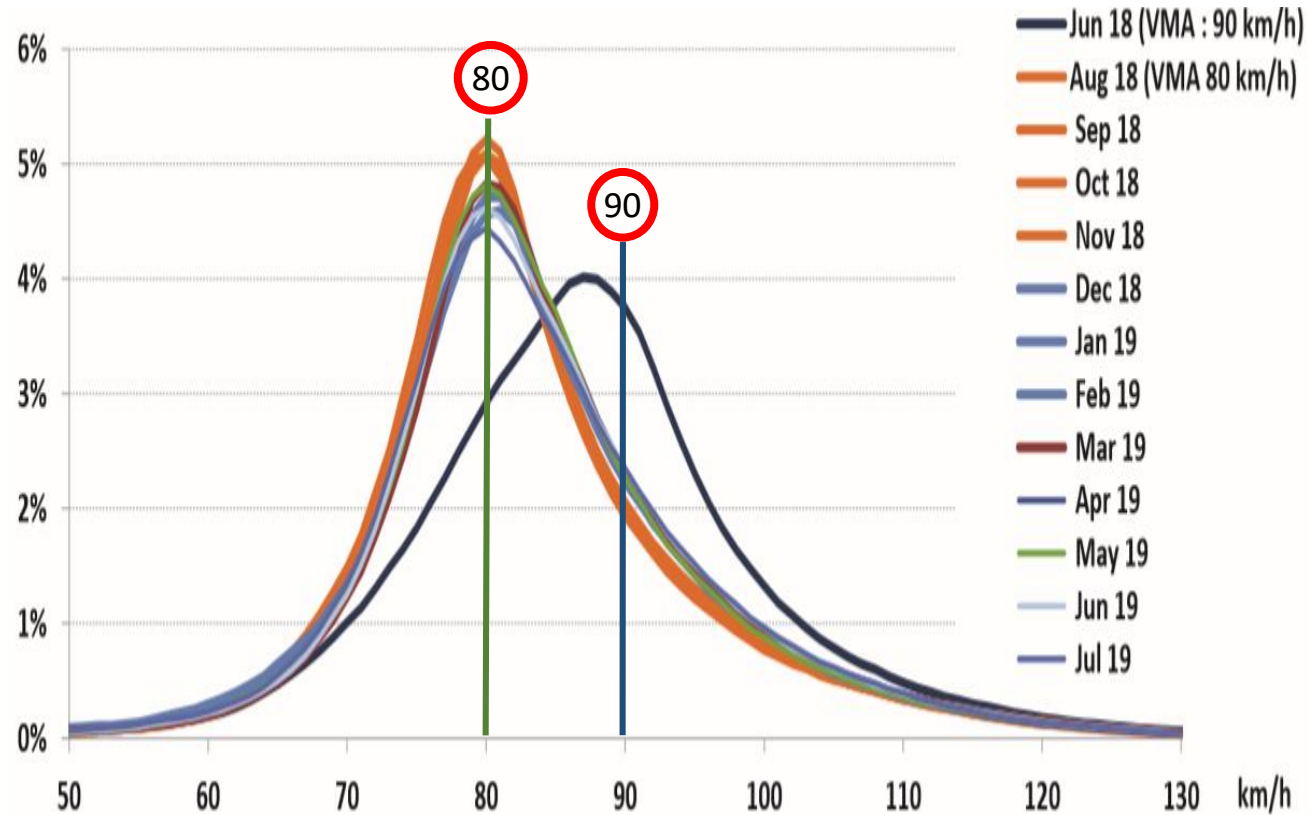


From a dedicated Cerema traffic observatory (50 permanent traffic/speed counts)

- A sudden drop of passenger cars driving speeds from the very 1st July 2018, although it was a Sunday
- The decrease on average driving speeds for passenger cars and heavy goods vehicles :
 - -3.9 km/h for passenger cars between June and September
 - -1.8 km/h for HGV between June and September (their speed limit was already max 80km/h)

Driving speeds changes before (June 2018)/after (August 2018 +)

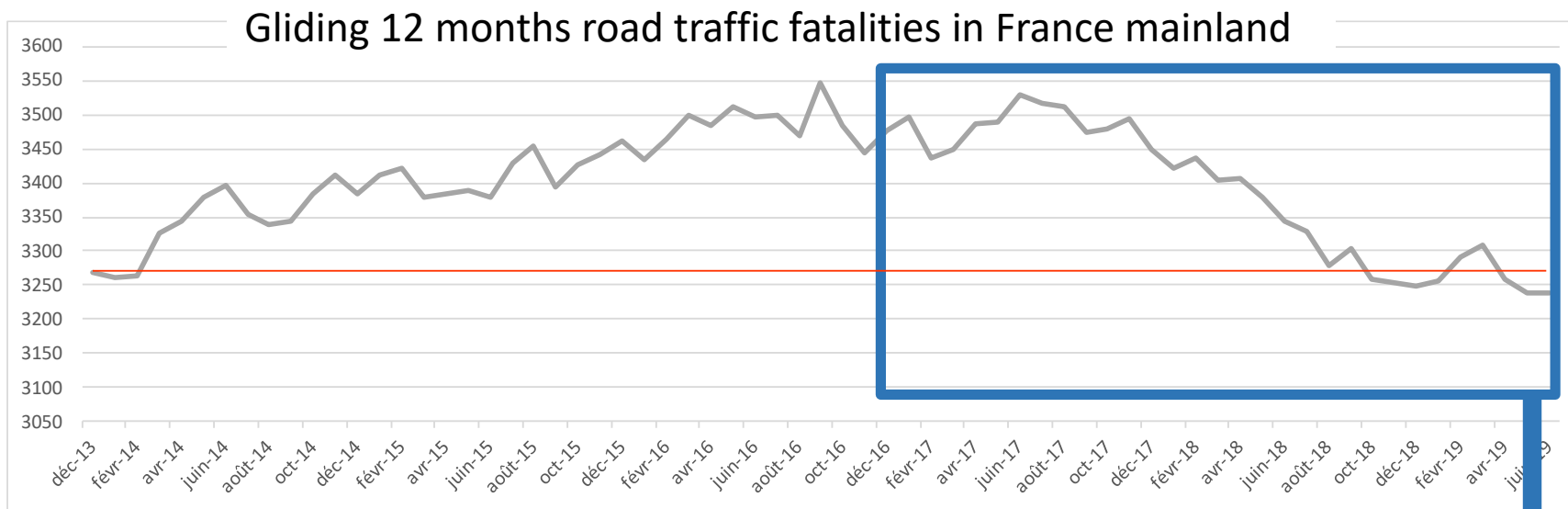
Speed distribution of passenger vehicles on French two-way roads)



After period shows :

- shift to the left for the whole driving speed distribution
- driver behaviour stability once the measure is in place.

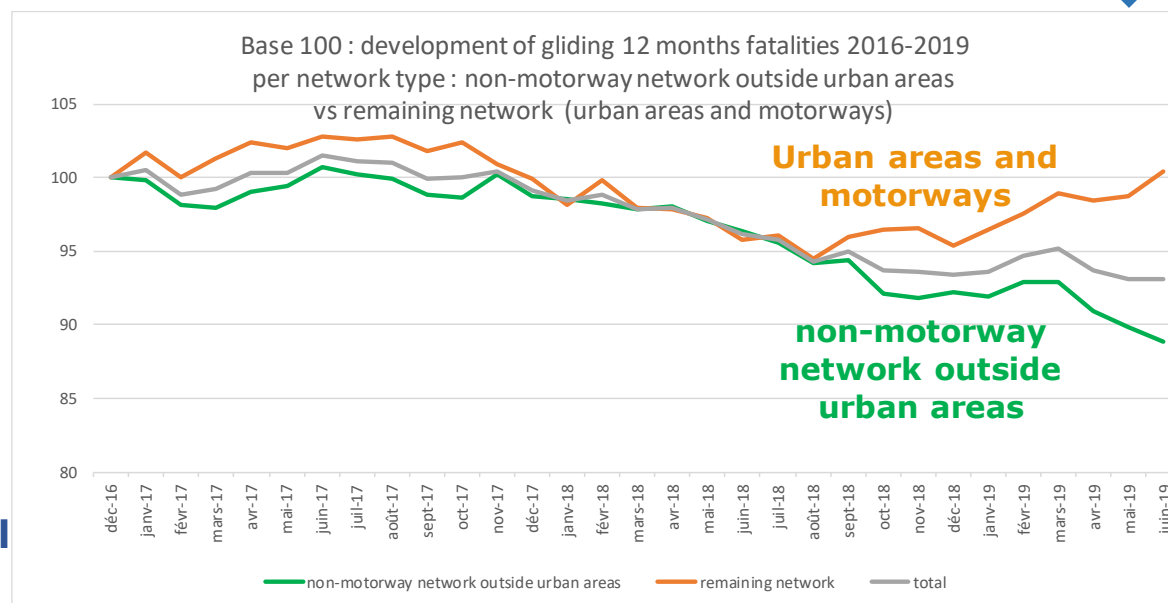
Road safety performance on roads outside built-up areas fares better than on remaining network



1st semester 2018 : falling trend for all networks

2nd semester 2018 :

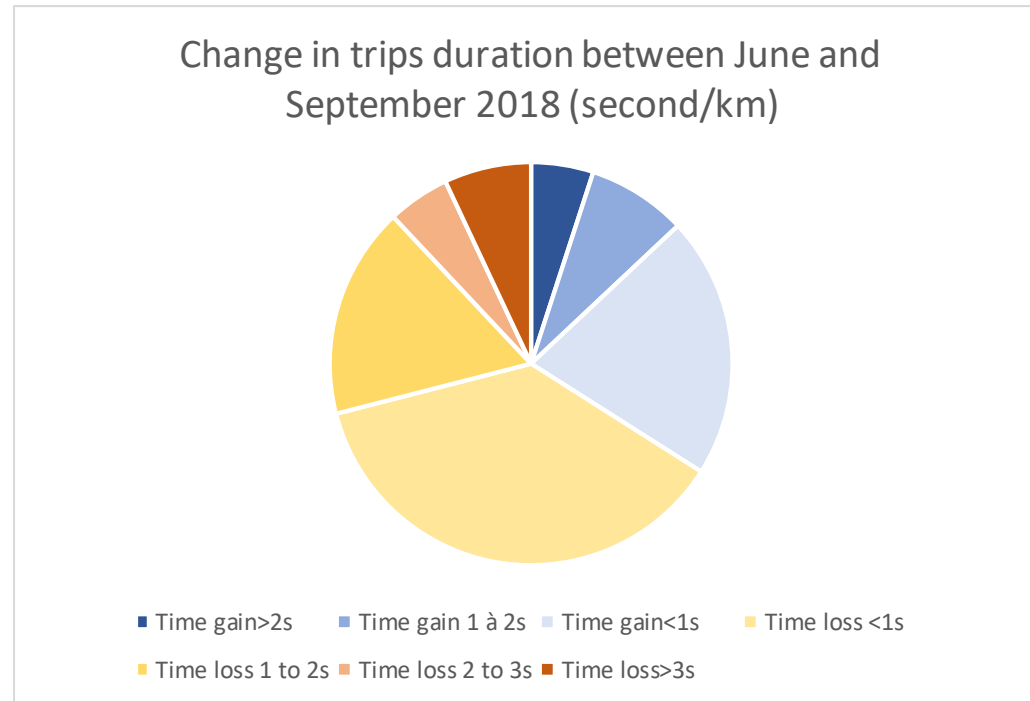
- rural roads fatalities decrease
- Fatalities increase on remaining network



Despite weather hazards and vandalized radars, 1st semester 2019 : rural non-motorway roads fare better than the rest of the network.

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

- On average, a travel delay of one second per kilometre over 300 30-km itineraries
- 34% of itineraries even noticed time saving.
- 37% of itineraries noticed a travel delay under 1 second per kilometre
- 12 % have a travel delay higher than 2s/km.



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

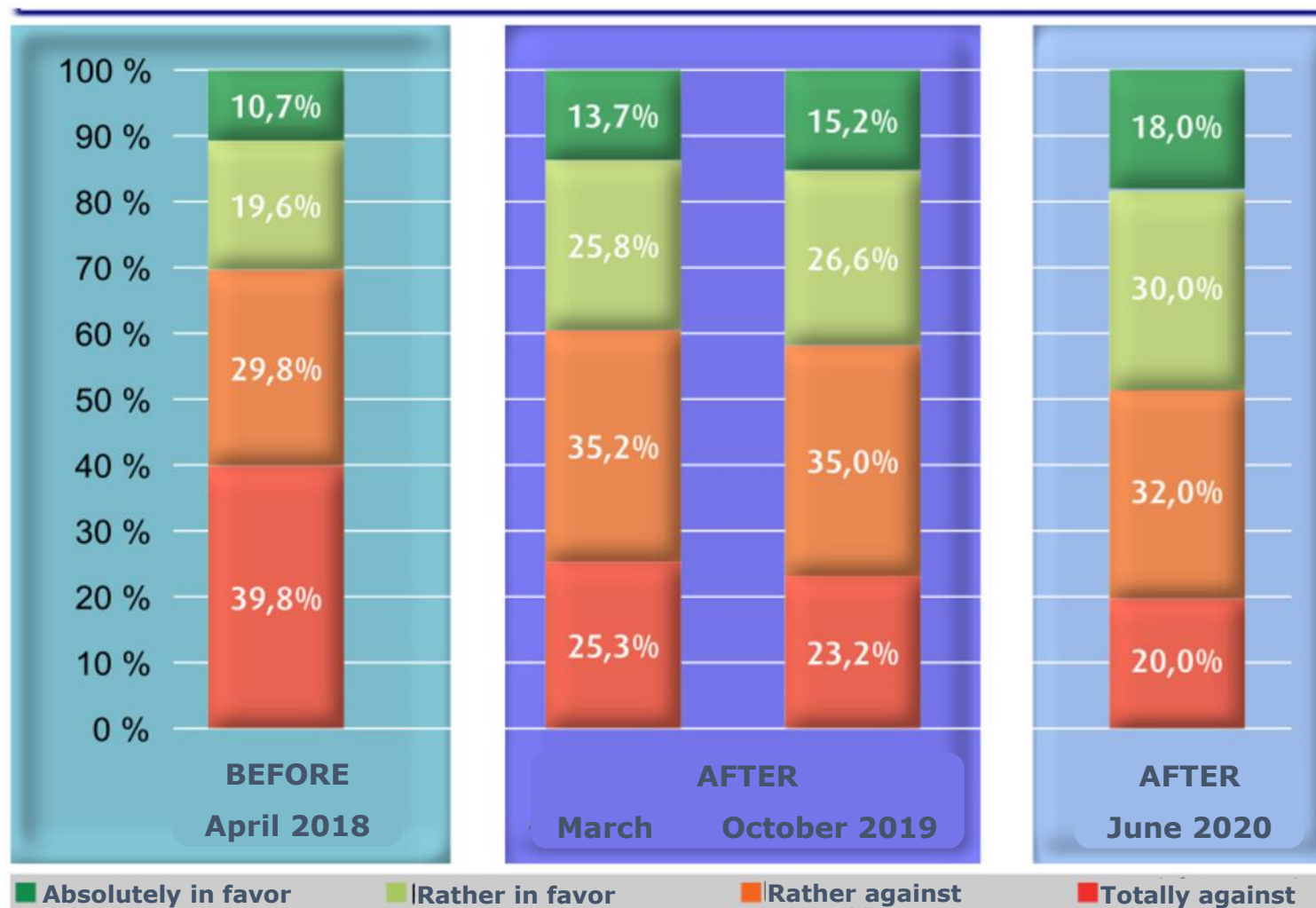
Before

- Survey end April, 2018, 5,310 respondents aged 18 +, representative of French population
 - 84 % use car as main travel mode on that network
 - 30% are in favour of the measure, 40% against it.
 - 77% intend 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 rarely quoted.

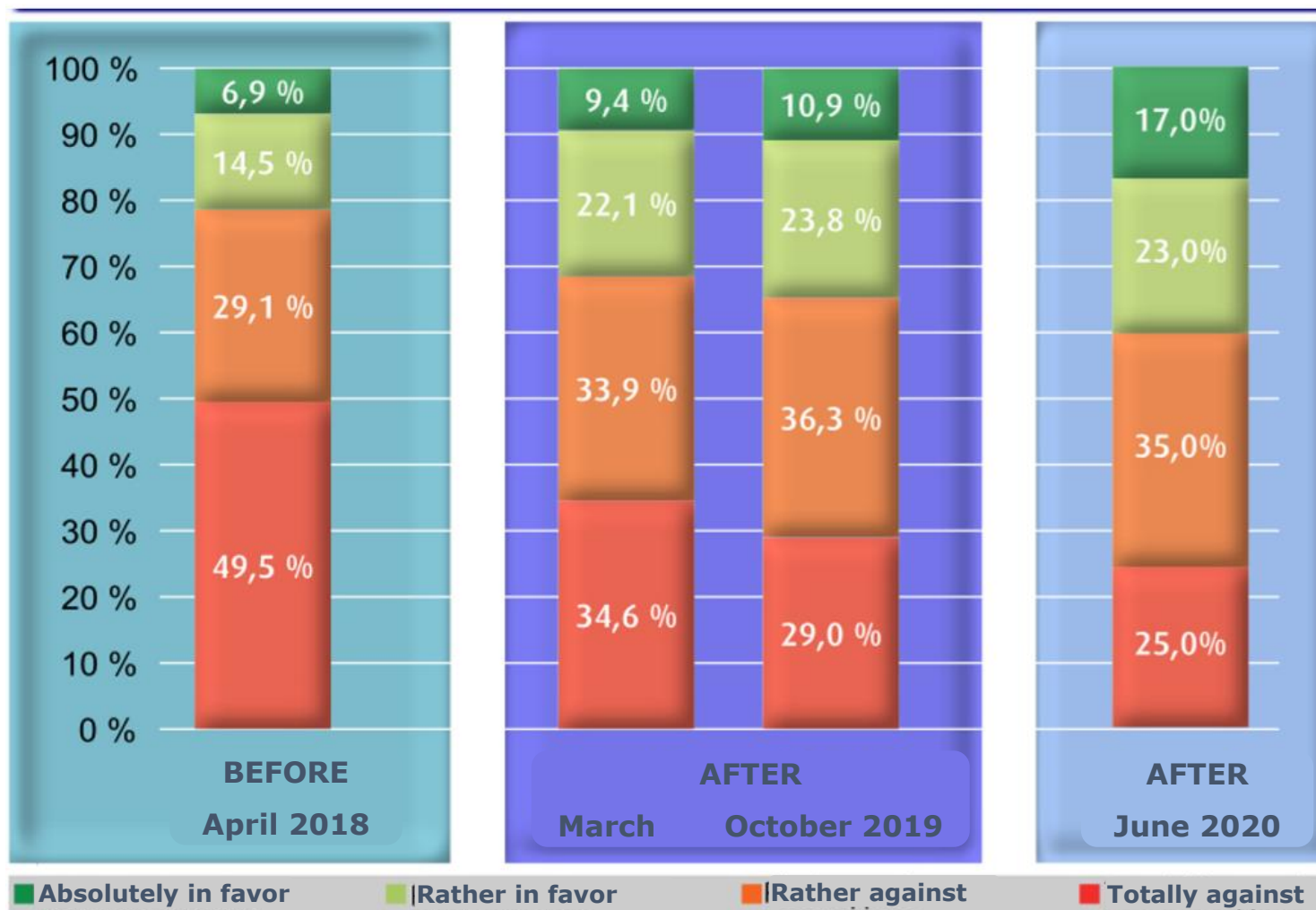
After

- Survey early March, 2019 (after yellow vest movement)
 - 25% still totally opposed to 80 km/h (40% before)
 - Agreement progressing including among rural people, except for two-wheelers.
 - Respondents declare additional travel time generally under 5 minutes.
 - For 28%, no journey time difference.

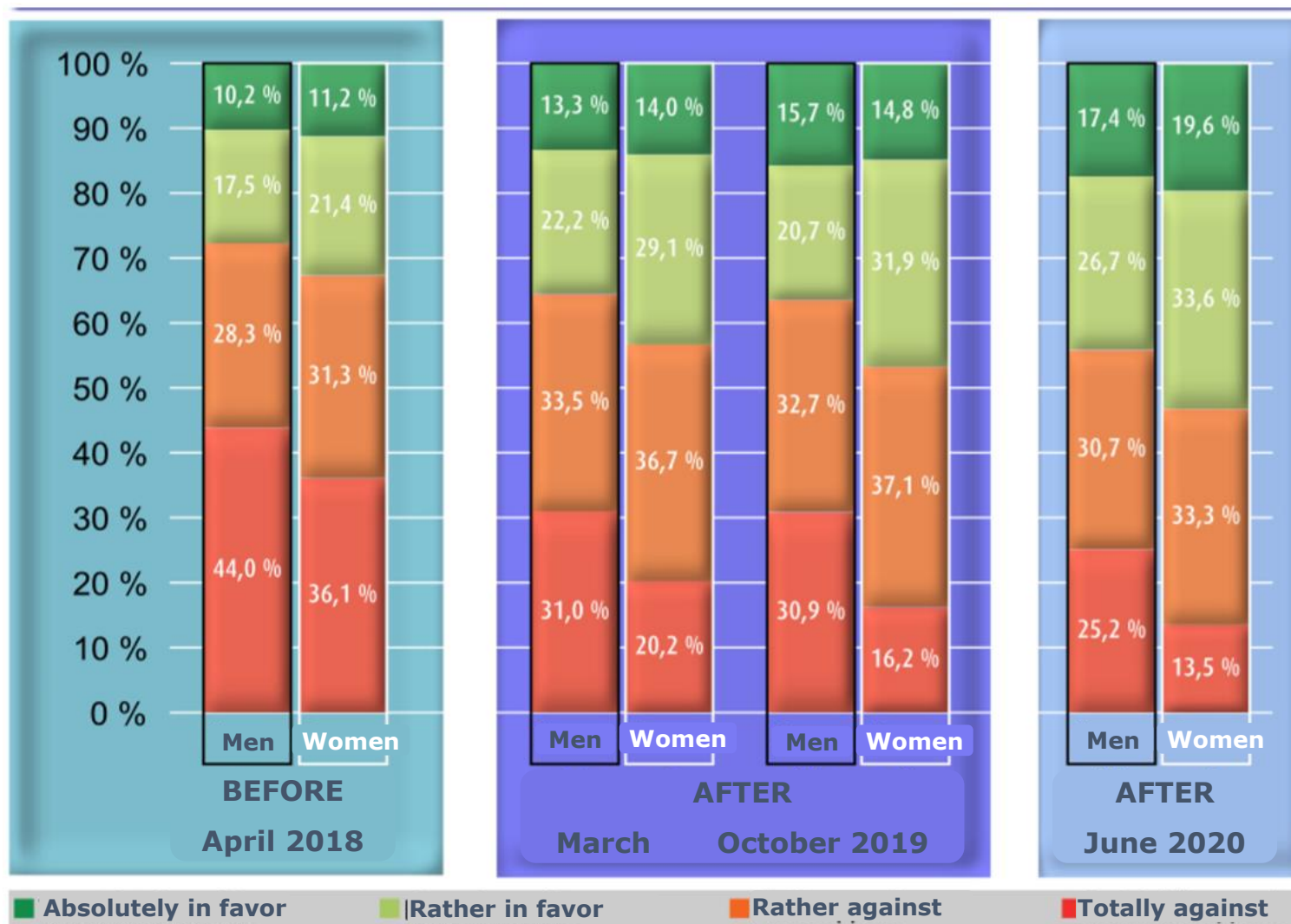
Agreement is progressing among all populations



and in particular for people living in rural areas



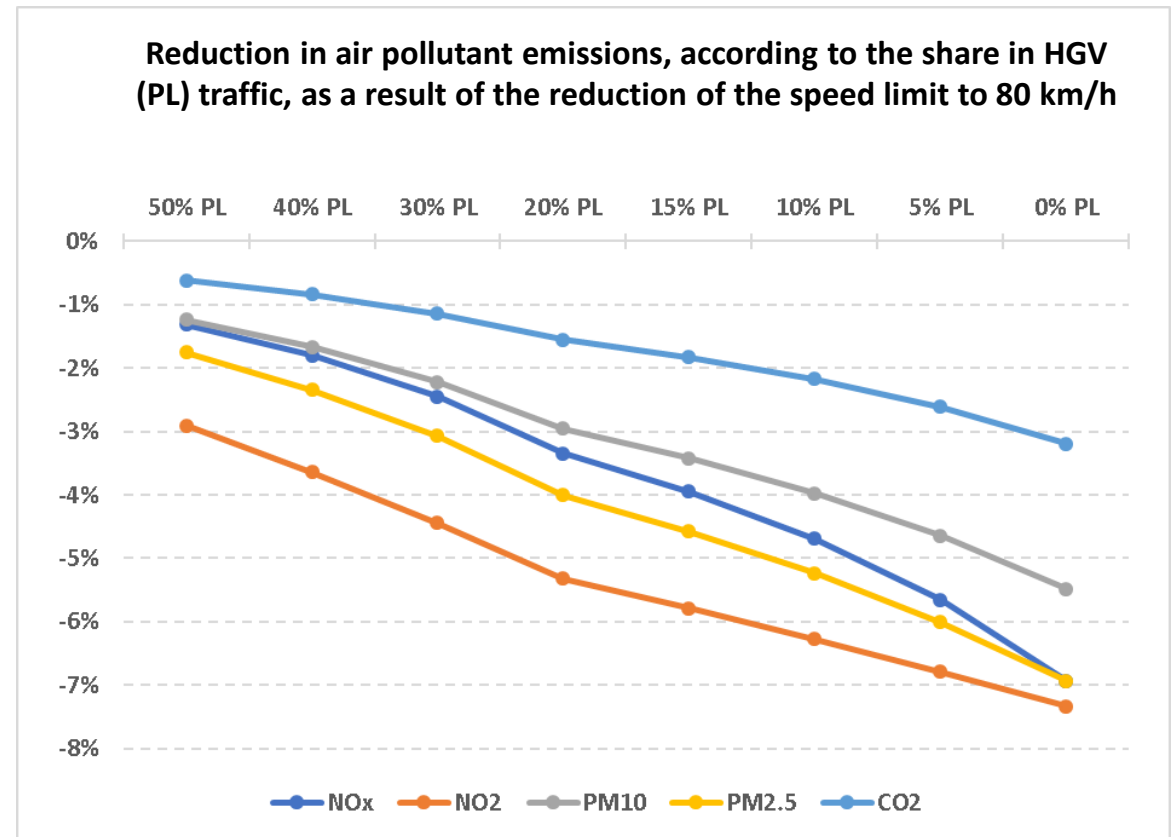
Women agree more often with the new measure than men



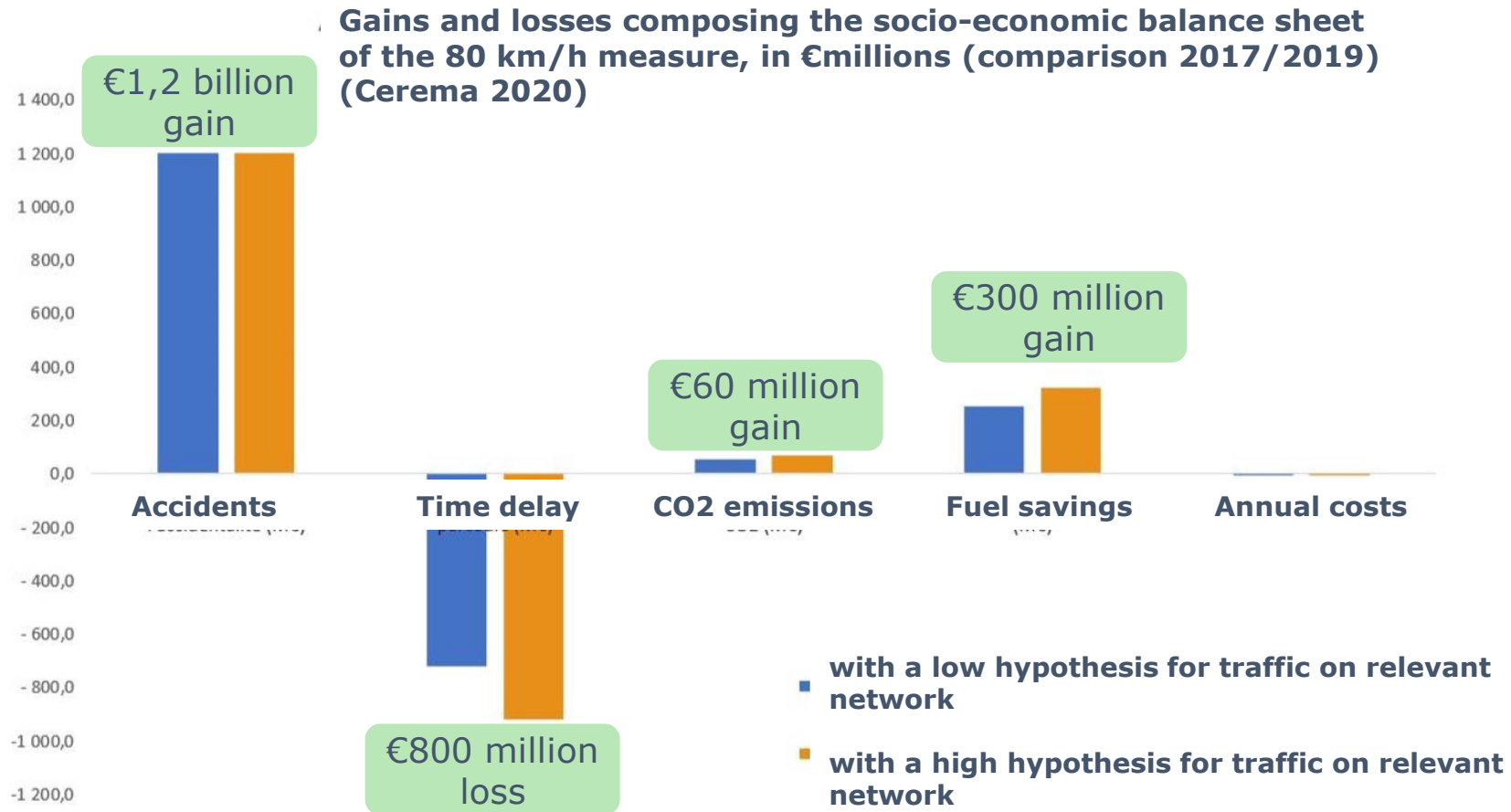
Good news expected also on air pollutant emissions

A study from ATMO Auvergne Rhône-Alpes based on models currently available concerning air pollutants expects 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.



A positive overall socio-economic balance sheet in the order of €700 million per year



More than 300 lives were spared over 20 months

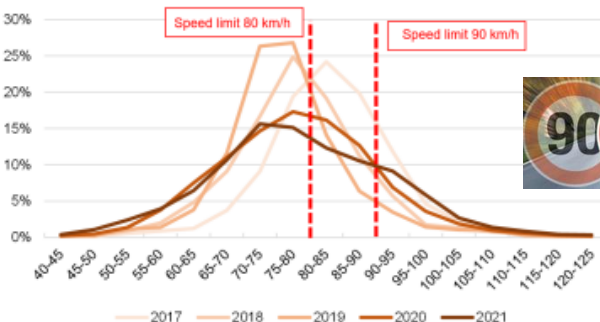
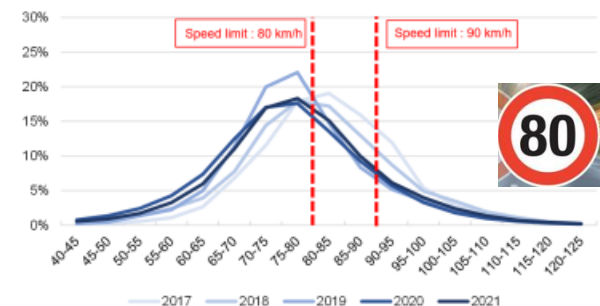
- A highly effective and low-cost measure
- A strong decrease of fatalities thanks to an overall decrease of practised speeds
- A small journey-time increase of 1 second per km
- An on-going increase in acceptability over time
from 30% in favour to 48%, 2 years later

A difficult way forward : change of law + COVID period

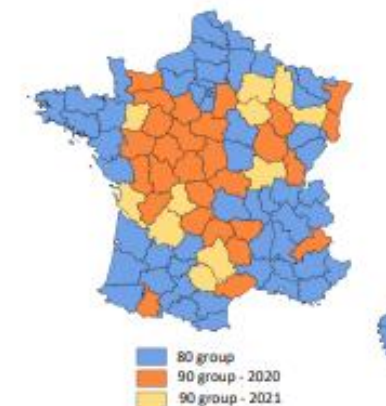
- 80 km/h : a Prime Minister decision
- « New mobility » Act (Dec 2019) : local authorities can raise back to 90 km/h on selected roads :
 - Not for the trunk road network (80 km/h)
 - Discussions at county level
- Risk that roads selected are from the main local network where :
 - 38% fatalities occur on the first 10% main rural roads
 - 55% fatalities occur on the first 20% main rural roads
 - 64% fatalities occur on the first 30% main rural roads
- Expert committee advice in July 2019, based on safe system :

<https://www.onisr.securite-routiere.interieur.gouv.fr/en/knowledge-centre/road-environment/rural-networks/departure-from-the-80-kmh-speed-limit-decision-support>

Impact of raising the speed limit to 90 km/h totally or partially in 40% of the counties



Department families LRSI	Killed on considered network	Average 2013-2017	2021	Change 2021/2013-17
Mountain	80 group	92	74	-19,4%
	90 _{total} group	89	79	-11,2%
Rural	80 group	285	229	-19,6%
	90 _{total} group	345	289	-16,3%
Mono-polarised	80 group	281	225	-19,8%
	90 _{total} group	119	101	-15,4%
Multi-polarised	80 group	271	207	-23,6%
	90 _{total} group	200	160	-19,8%



- Increasing the speed limit to 90 km/h in 39 departments will have cost 74 lives in 2021 according to an estimate based on the month of implementation of this decision. This corresponds to an increase in mortality of + 13.1 %.
- In a “normal” year, increasing the speed limit to 90 km/h in 39 departments could lead to an additional number of fatalities of around 89.
- A + 13.1 % increase to the fatalities recorded in 2019 on all non-motorway roads outside built-up areas in France mainland would correspond to 254 additional deaths.



More info on ONISR website :

<https://www.onisr.securite-routiere.gouv.fr/en/knowledge-centre/evaluation/evaluation-of-the-measures/increasing-the-speed-limit-to-90-kph-on-certain-departmental-roads>

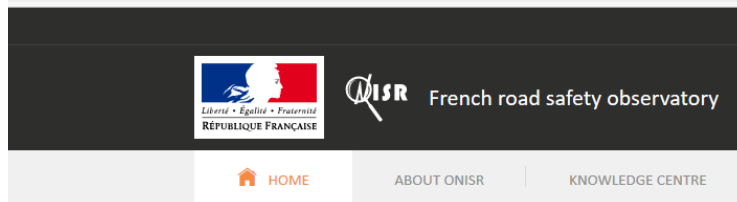
As a conclusion, speed is not like any other factor

- Speed (FLAM) : 1st risk factor for fatal accidents outside built-up areas (37 %)
- But : **speed limit change > decrease in overall speeds > fatal accidents drop**
whichever the risk factor

Dangerous roads are no longer those **we drivers** think. Severe crashes occur :

- **where the traffic is (main network)**
- with free-flow speeds (away from traffic jam)
- without central reserve separation, road users separation, grade-separated crossings (single carriageways)

<https://www.onisr.securite-routiere.interieur.gouv.fr/en>

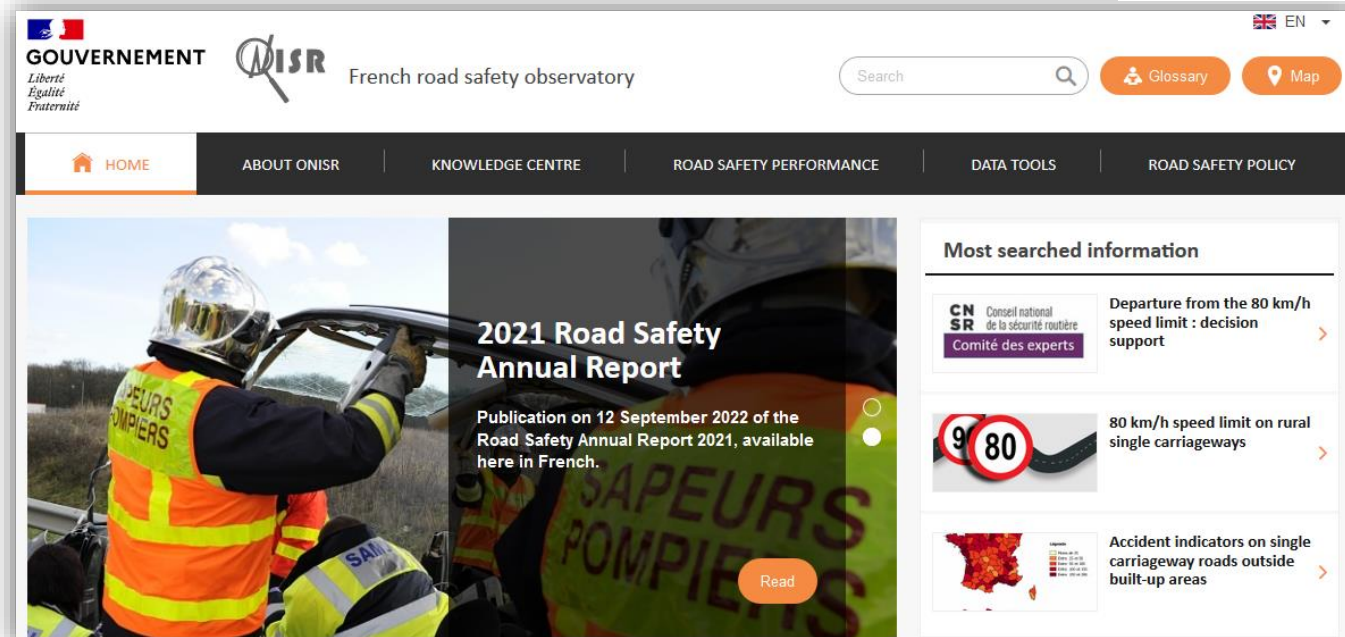


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More information on our website

<https://www.onisr.securite-routiere.gouv.fr/en>



Websites to compare countries performance :

OECD – ITF – IRTAD : <https://www.itf-oecd.org/IRTAD>

WHO : <https://www.who.int/publications/i/item/9789241565684>

European commission : https://road-safety.transport.ec.europa.eu/statistics-and-analysis_en