Speed management in France

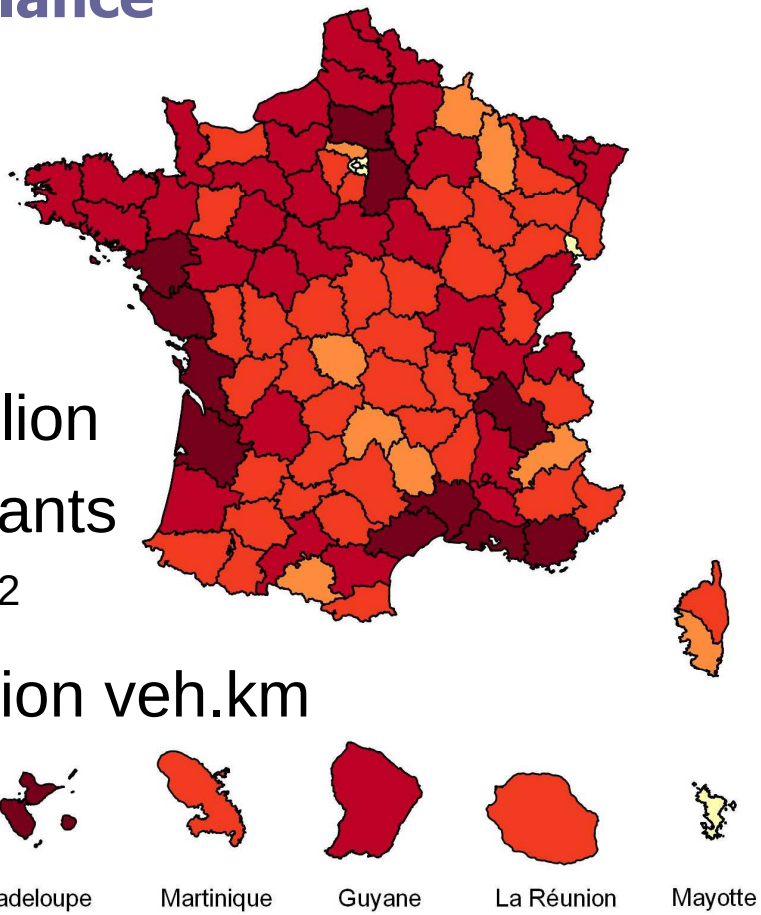
Reducing speed limits vs automated speed cameras

03/05/2019

Manuelle SALATHE

Head of the French Road Safety Observatory

France at a glance



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

Legend

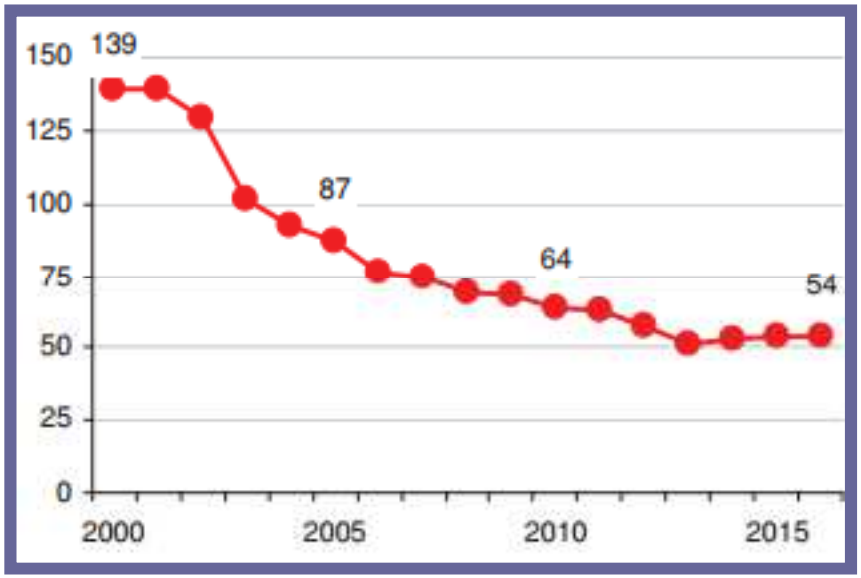
- Fewer than 25
- Between 25 and 50
- Between 50 and 100
- Between 100 and 150
- Between 150 and 286

- Population : 66 million inhabitants
- Area : 600.000 km^2
- Exposure : 606 billion veh.km

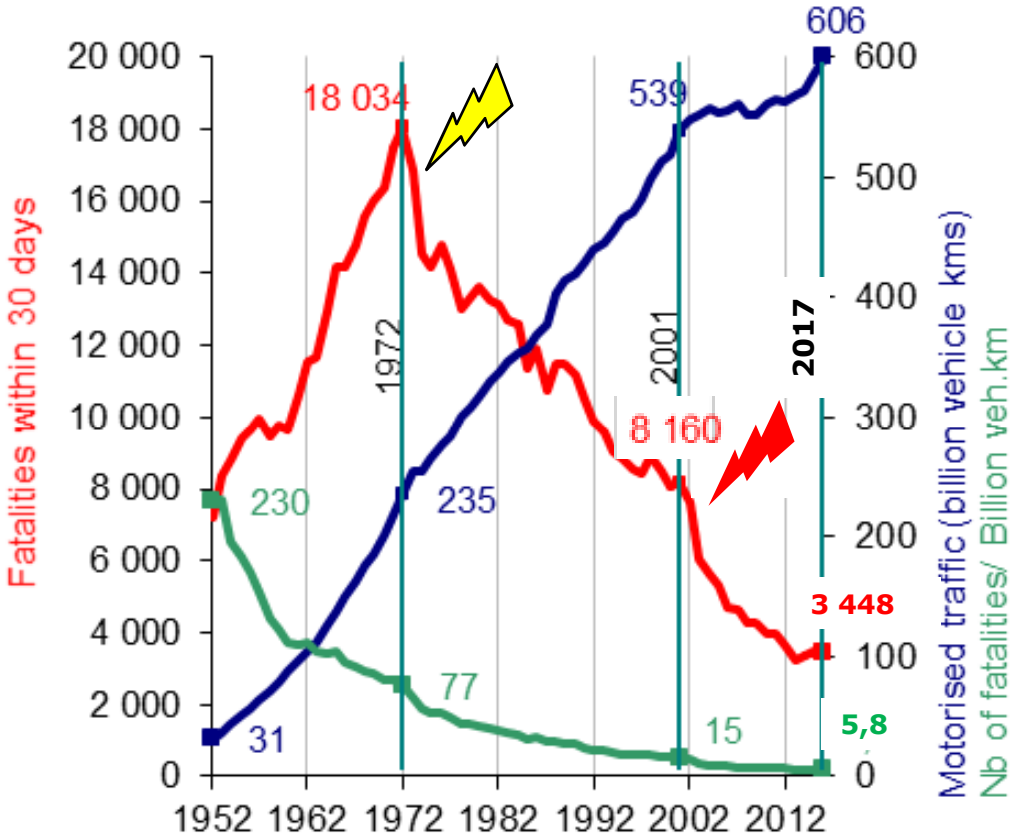
- 3 700 RT fatalities (incl overseas)
- 80% population lives in urban area
- 63% RT fatalities on rural network

Fatality trends against population and traffic

Development of the number of fatalities per million inhabitants since 2000



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



- Setting speed limits up

- Implementing automated speed cameras

Evolution in radar technologies – static equipments

Static basic speed cameras

2003 : Phase 1 **2005 :** Phase 2 **2007 :** Phase 3 urban **2 000 units**

Static speed cameras discriminating several lanes, vehicle shapes (HGV), catching vehicles from rear or front

2011:

400 units

Average speed :

2012:

100 units

Evolution in radar technologies – mobile equipments

Portable speed cameras 2010, 2013

500 units

Moveable / works speed cameras 2016 :

250 units

Car built-in speed camera technology 2016:

400 units

2017 performance

26 million flashes

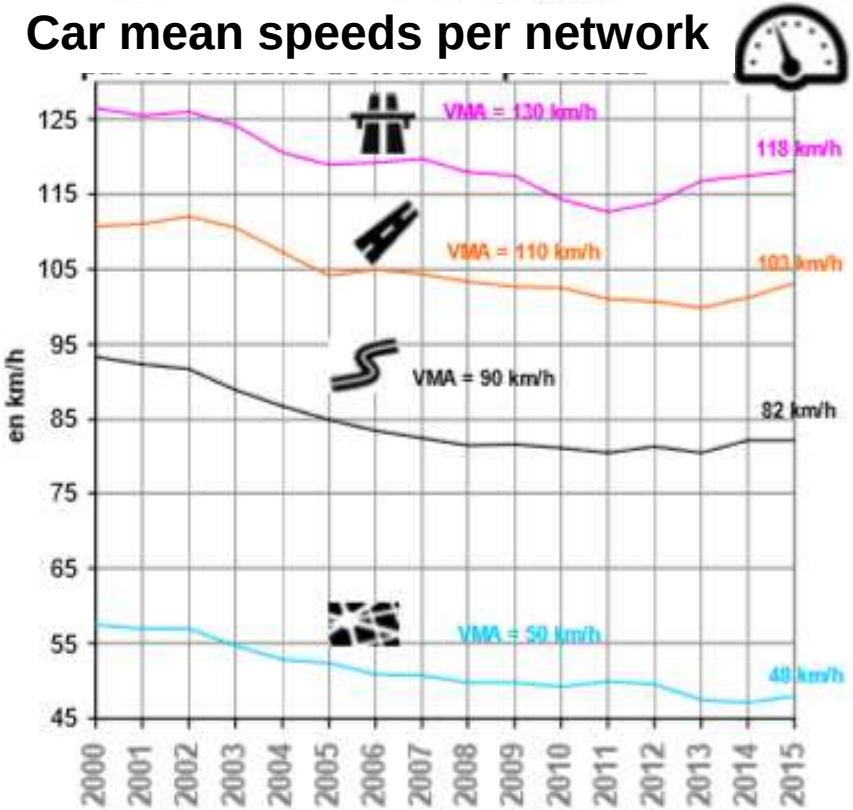
among which 17 million offences sent

1 billion euros collected

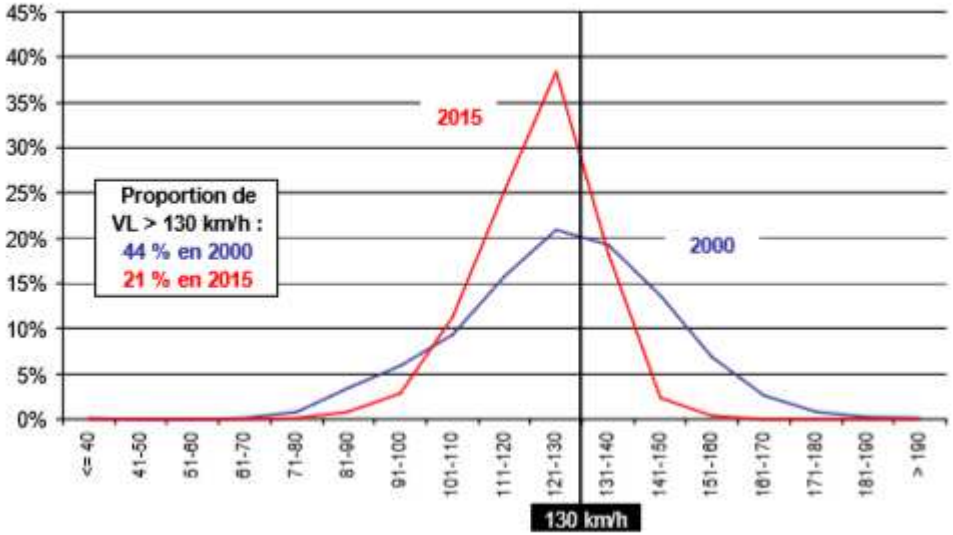
92% of the money goes to road safety
- radar maintenance and upgrade
- road safety research and actions
- road improvements

Evaluation of the impact of radars on speed

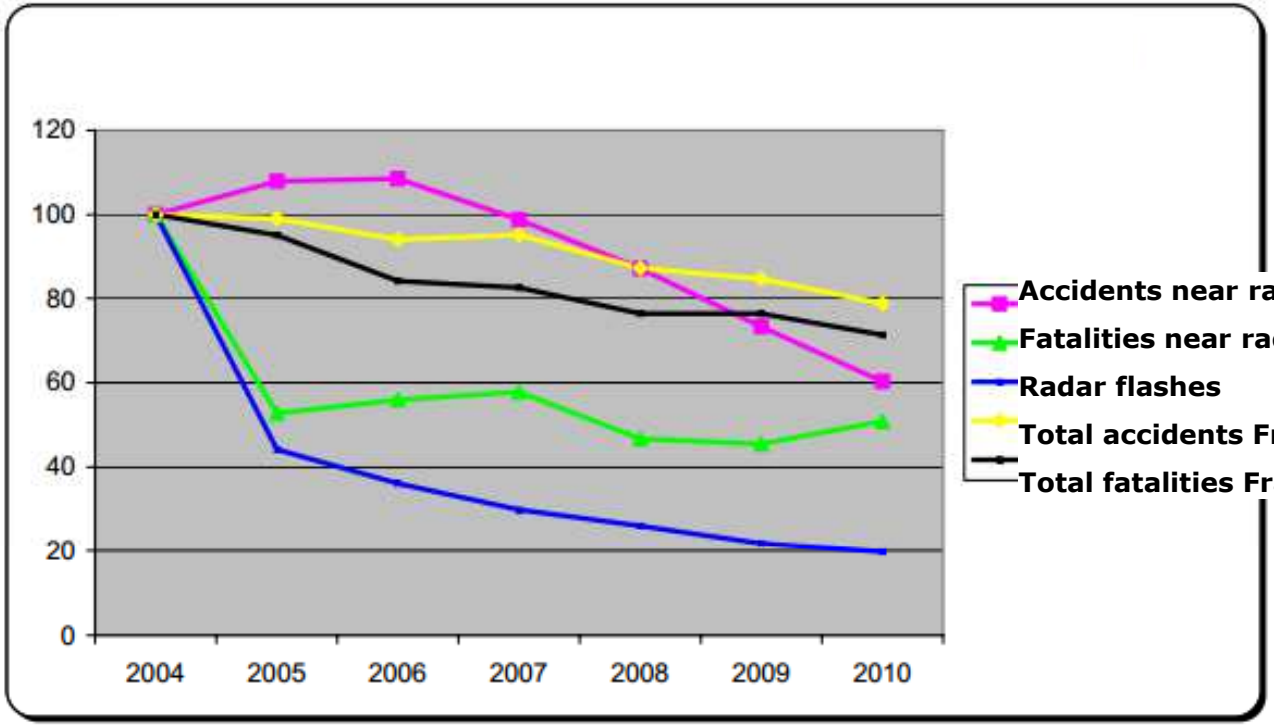
Car mean speeds per network



Car speed distribution on motorways (speed limit 130 km/h)



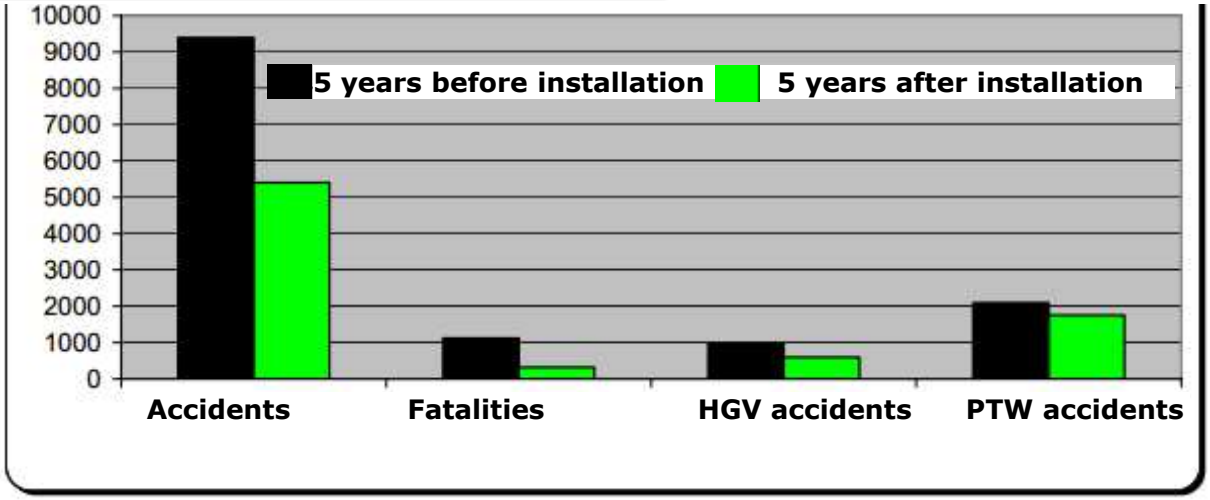
Evaluation of the impact of radars on road safety



Evolution of the number of accidents, fatalities, and radar flashes

Base 100 in 2004

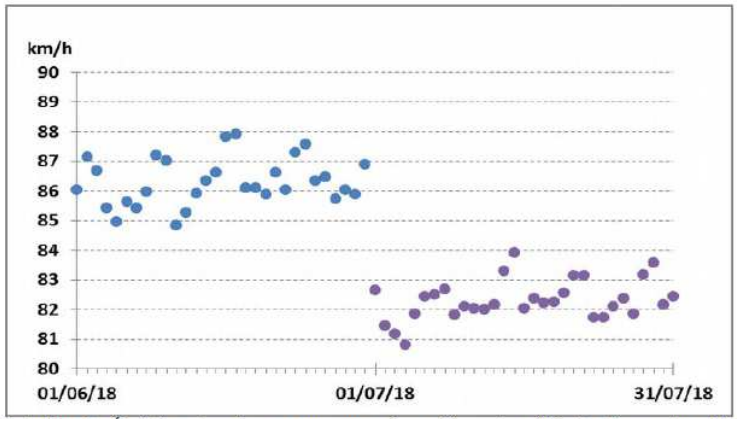
Evolution of the number of accidents within 1000m of a radar, for 1540 radars



First results from lowering the speed limit on rural single carriageways

Implementation on 1st July 2018

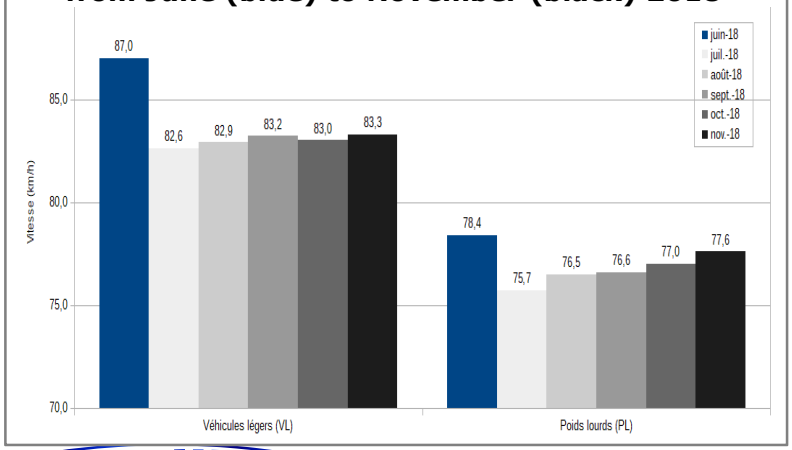
Average speed changes before and after (June to November 2018)



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

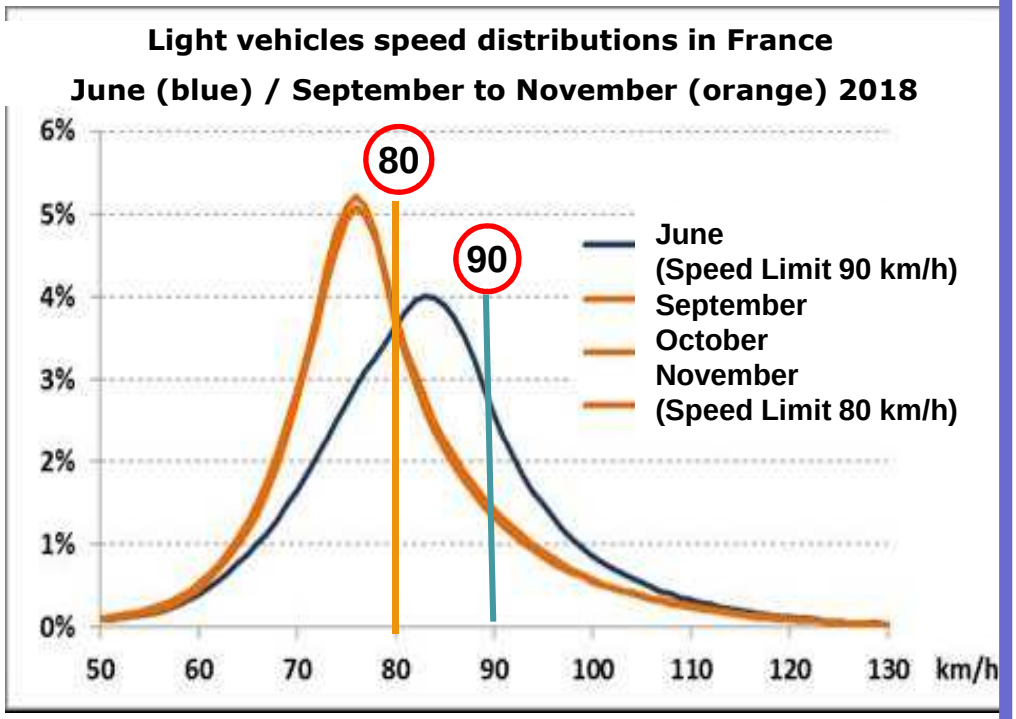
- **A sudden drop of light vehicles driving speeds from the very 1st July 2018, although it was a Sunday**

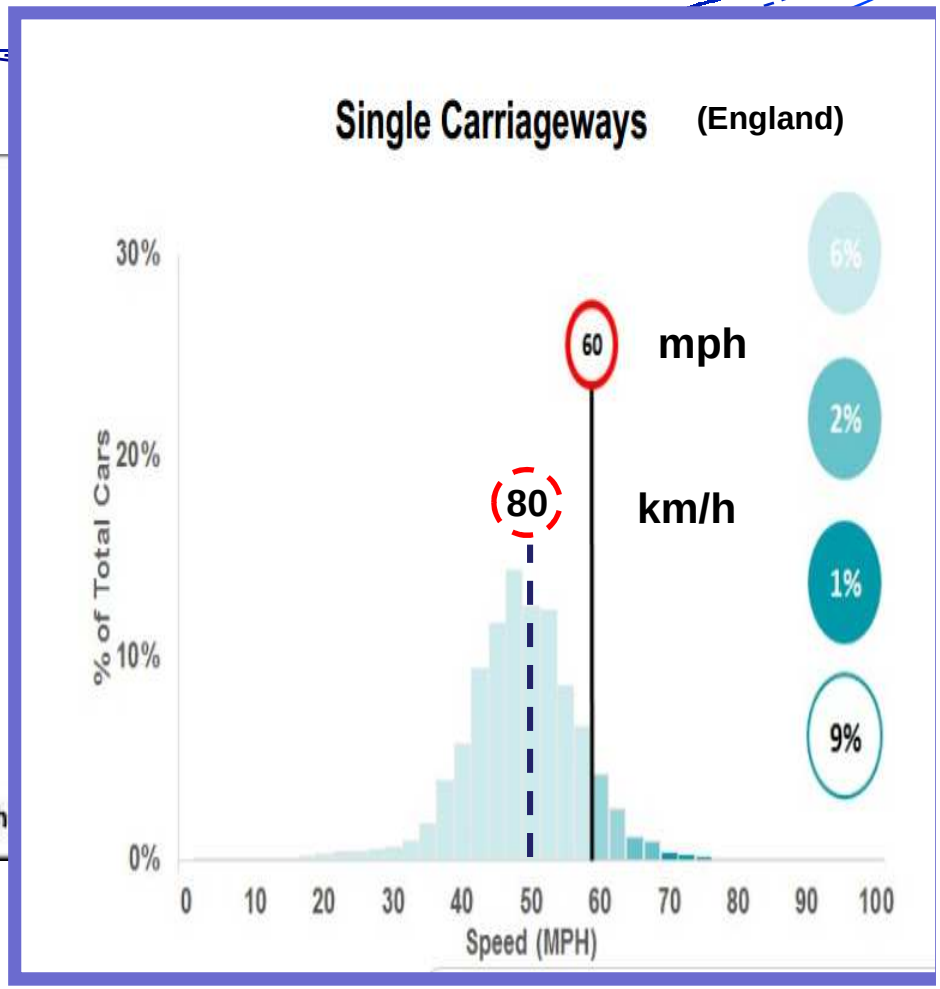
Light vehicles (left) and HGV (right) mean speeds from June (blue) to November (black) 2018



- 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)



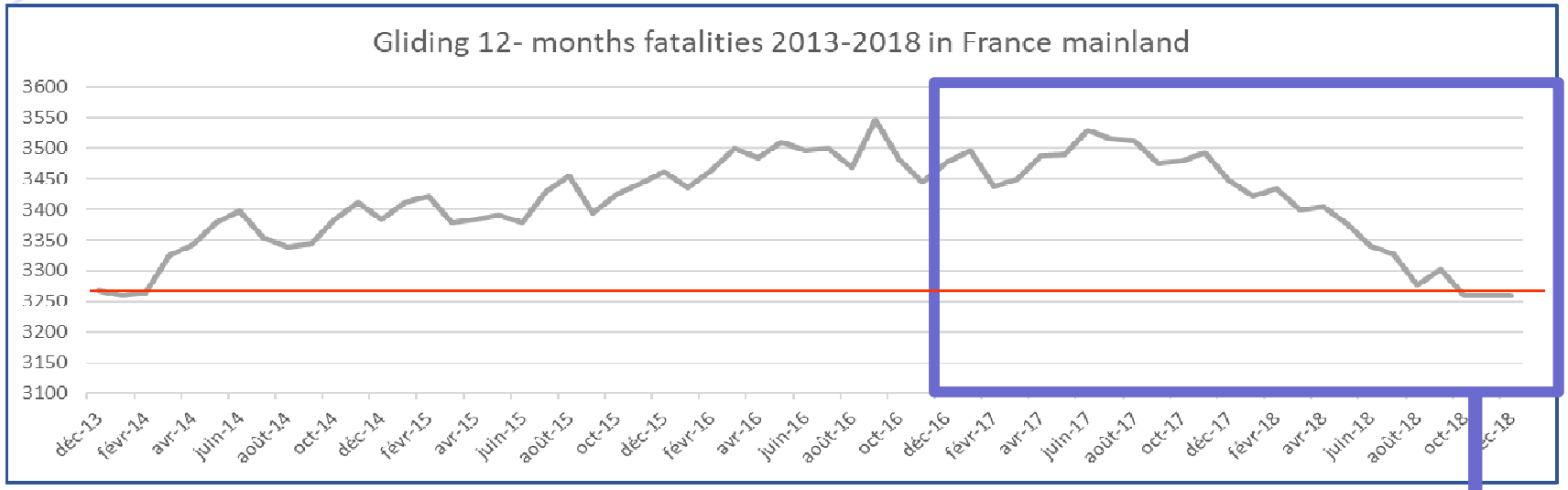


- The whole driving speed distribution

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.

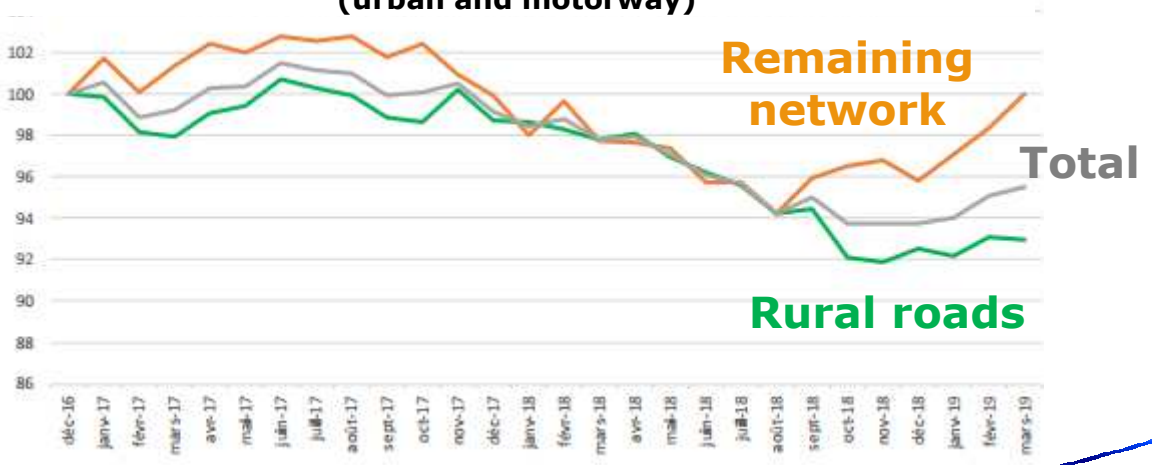
Road safety performance on rural roads fares better that on the remaining network



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 2016-2019 per network type : rural roads vs remaining network (urban and motorway)



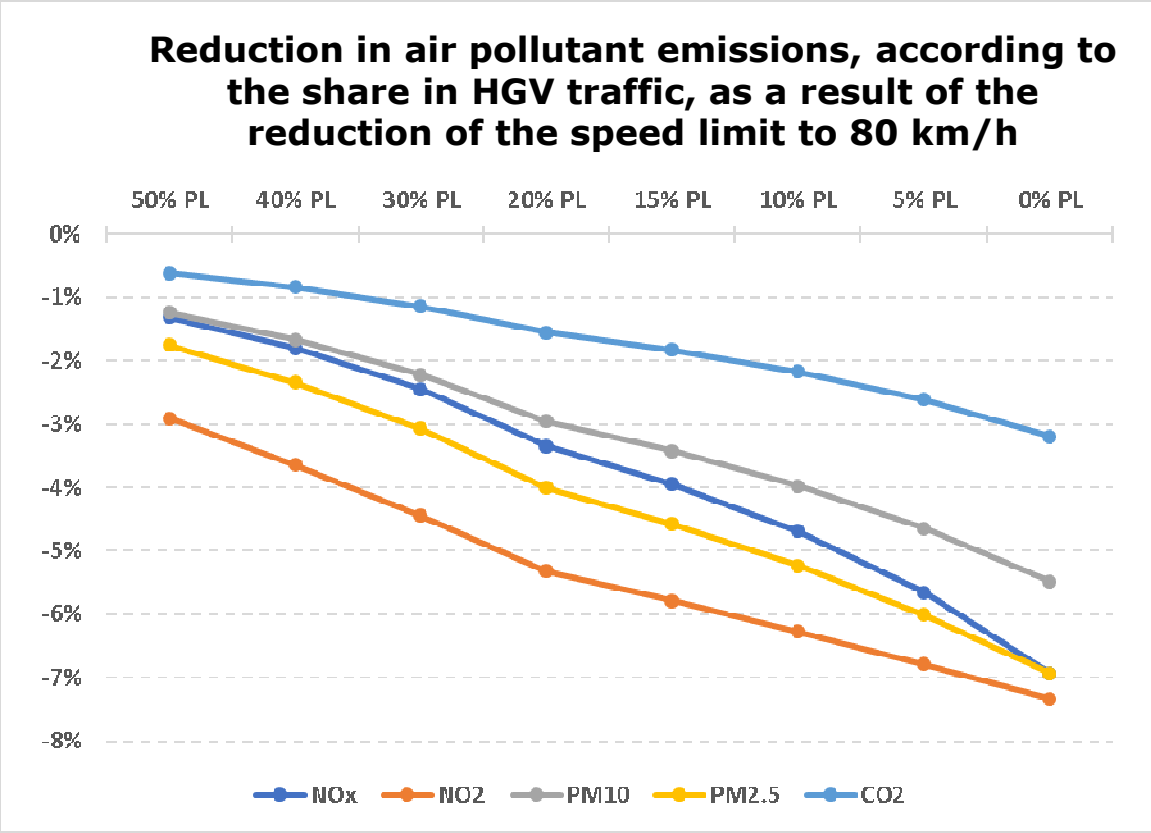
Good news expected also on air pollutant emissions

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.



Make sure you target the right network : check your data

Reducing individual risk is important
(number of fatalities per km travelled)

but

Most fatalities occur where the traffic flows
(number of fatalities per km of network)

Website: https://www.onisr.securite-routiere.interieur.gouv.fr