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National behavioural survey: speed 2012

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Research report N° 2013-R-06-SEN

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Responsible editor: Karin Genoe

Editor: Belgian Road Safety Institute – Knowledge Center Road Safety

Date of publication: November 2013

Complete report available in Dutch and French:

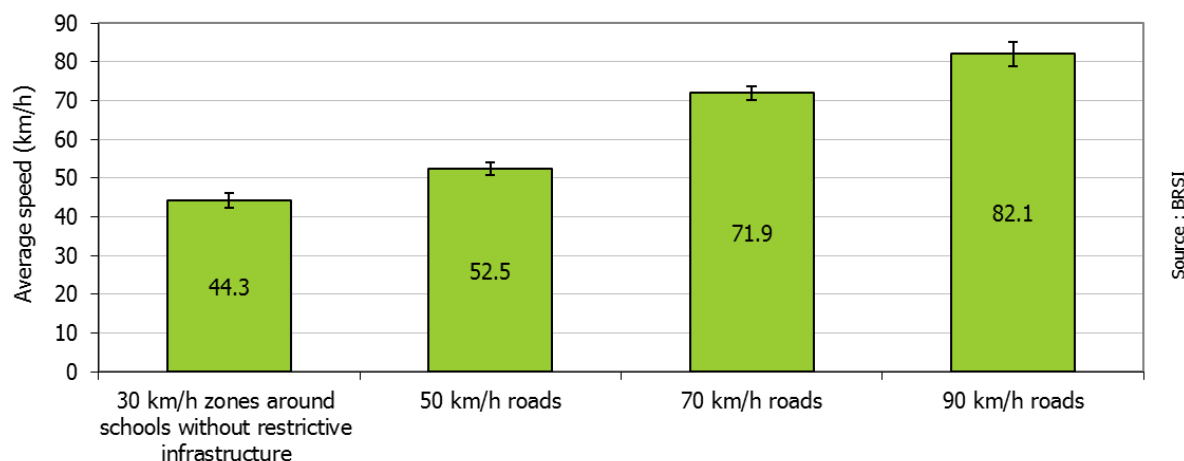
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Summary

Noteworthy information

- Measurements for speed behaviour are carried out on straight roads without any restrictive infrastructure. They are carried out on vehicles travelling at “free speeds”, i.e. whose speed is determined exclusively by the driver’s behaviour and not by infrastructure designed to be restrictive or traffic conditions.
- For 2012, as for previous speed measurement campaigns, the average free speed continues to be higher than the maximum authorised speed on all types of roads, except those where the speed is restricted to 90 km/h:



- The speed travelled in 30 km/h zones around schools has been dropping consistently since 2007, but this remains the type of road where most speeding offences take place. We note a “30 km/h zone” effect when children are going into and coming out of school, but this is insufficient.
- There has not been any significant change in speed on 50 km/h roads since 2007.
- We have noted a slight improvement since 2010 on 70 and 90 km/h roads.
- Speed outside built-up areas is lower in Flanders than in Wallonia, which could be due to differences in behaviour as well as to the morphology of the roads.
- Measurements of behaviour cannot be used to assess campaigns carried out to limit speeding (speed traps, restrictive infrastructure, changes in speed limits). One should not draw conclusions regarding the impact of such initiatives based on the results of this study.
- Speed must remain a top priority in road safety policies by focusing on the three critical aspects: raising awareness, traffic law enforcement, and technical advances (in terms of both infrastructure and vehicles).

Background

Speed is a key element in road safety. The reason why there are accidents is of course because vehicles travel from one place to another. Speed is the primary cause of a great many accidents and, even though it may not be the cause of an accident, it can be an aggravating factor increasing the violence of the impact. Moreover, as a general rule, driving at reduced speeds always increases road safety. In order to ensure that a road safety policy is effective it is therefore important to monitor speed on the roads so as to gain a picture of the progress accomplished and the effectiveness of the policies in place. In this framework, at the request of the Federal Road Safety Commission the Belgian Institute for Road Safety has been taking measurements of speeds travelled on roads since 2003. This report contains the result of these measurements up to 2012.

Methodology

Speed measurements were taken at 150 sample locations on the Belgian road network. At each of these locations speeds were measured 24 hours a day for one week during the month of October. Given the impact of road characteristics and the road environment on the speeds driven, and in order to ensure comparability among the indicators, the locations that were chosen had standard features. These were straight portions of road with as few elements to slow drivers down as possible. This made it possible to measure “free” speed, which is the best reflection of the free choice of drivers. In order to calculate the indicators, only private vehicles were measured and furthermore only those where the drivers could choose their speed freely while not hindered by vehicles in front of them. This behavioural measurement therefore shows, all other things being equal, if there is an increase in the speed driven from one year to another. We can presume that the speed measured is considered reasonable by drivers while taking account in the main of their mobility needs, their perception of the risk of an accident linked to their speed, and the subjective likelihood of their speed being checked. The behavioural measurement as such does not cover traffic speeds in general in all different types of traffic conditions, nor does it assess the effects of any deterrents installed to reduce speeds since measurements were not taken on roads where speed is restricted by infrastructure.

Results

For 2012, as for previous years, we noticed that the **average speed** of drivers who are not restricted by traffic conditions **is higher than the maximum allowed speed on all types of roads except for those with a 90 km/h limit** and with one lane in each direction. It is on roads in built-up areas where we notice that the average speed is highest compared to the speed limit, with an average of 52.5 km/h on 50 km/h roads. What’s more, there has been no reduction in speed on these 50 km/h roads for several years, where 56% of drivers exceed the speed limit and 15% drive at over 61 km/h.

We note a positive change in the average speed on 70 km/h roads since 2010, which is apparently confirmed in the measurements for 2012. Notwithstanding, the average speed is still 71.9 km/h, which is high in absolute terms. More than 50% of people drive over the maximum allowed speed and 15% drive at over 83 km/h. **We note a similar change on 90 km/h roads.** But, even if the average speed recorded is 82.1 km/h, 27% of people still drive over the speed limit and 15% drive at over 94 km/h. The speed differential between the average speed and the speed driven by the 15% of fastest drivers nevertheless fell slightly between 2010 and 2012, a sign of a smaller variation in speeds on 90 km/h roads. Even though it is on these roads that we note the lowest incidence of people exceeding the speed limit, we must not trivialise these excesses of speed either. After all, the higher the speed the more violent the impact in accidents will be for each additional kilometre per hour.

The 30 km/h zones around schools where there are no speed deterrents show a rather particular picture. Here, the infrastructure is not at all designed to ensure that people respect the speed limit and 91% of drivers exceed it, with 65% of them driving at over 40 km/h. We do note a change in speed at the start and finish of school hours, but this is insufficient because the average speed remains over 40 km/h even at these times. However, we do note a positive change on these roads with a constant reduction in speed since 2007.

At regional level, **there is a difference between Flanders and Wallonia on rural roads.** Average speeds in Flanders on 70 and 90 km/h roads are 69.3 and 80.3 km/h respectively, compared to 73.4 and 83.4 km/h in Wallonia. However, we must abstain from attributing this result uniquely to the idea that Flemish drivers are supposedly more careful or that speed management policies in Flanders are better implemented. This is because differences in the morphology of 70 and 90 km/h roads in the different regions can also have an impact on results. **It is in the Brussels-Capital region that we note the lowest speeds**, a result that should be qualified in part by the fact that Brussels has fewer long stretches of road where one can gather speed in comparison with to Flanders or Wallonia.

Since each vehicle is measured individually, the behavioural measurement also enables us to evaluate breaches of the rules regarding following distance. Here there is a distinct difference between urban and rural roads. In 30 km/h zones and on 50 km/h roads, between 17 and 19% of drivers do not use the right **following distance**. On 70 km/h roads, 30% of drivers follow too closely the cars in front of them and on 90 km/h roads this percentage increases to 35%

Conclusions and recommendations

Even though we note some encouraging signs on 70 and 90 km/h roads, the results of the survey still suggest a cause for concern and reveal speeding behaviour that still needs considerable improvement. A global reduction in speed, albeit very slight, still marks a great potential in terms of road safety. Hundreds of lives could be saved each year if speed limits were respected by most drivers. Reducing speed on the road therefore remains a high priority for the different players involved in road safety in Belgium, and this objective can be achieved via different approaches:

1. Continue to arouse awareness and focus in particular on breaking the positive image of driving at high speed that is often a feature in communications from the automotive sector and a prevalent notion among a lot of road users.
2. Increase traffic law enforcement efforts by making them more unpredictable and above all by reducing the margins for tolerance used in order to make the message clear to all road users.
3. Ensure coherence in speed limits by standardising limits for roads with similar morphologies and by using road infrastructures consistent with the speed limits to be respected.
4. Continue to develop technical tools to help drivers respect speed limits, namely by working on the technical (primarily the need to map out speed limits) and legal obstacles to implementing the ISA system.
5. Make companies aware of their responsibility to ensure road safety within their own organisations by imposing timetables that are compatible with respect for speed limits on the part of their employees.
6. Continue to monitor speeds via indicators and try to identify individual factors that push people to speed as well as the sub-groups among which inappropriate behaviour is most prevalent.

Measuring behaviour provides a global diagnosis of the degree to which speed limits are respected in Belgium, but it does not provide information on specific cases. The rather mixed results noted in this survey therefore do not suggest that local initiatives such as changing a road's layout, changing a speed limit or installing restrictive infrastructure are not effective. On the contrary, because as long as Belgian drivers demonstrate a lack of respect for speed limits in unrestricted driving conditions such as those chosen for the purpose of these measurements, measures restricting behaviour will be justified.

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