Dear Mr Cullinane,

Highway Code stopping distances

Thank you for your letter of 27 July about Highway Code stopping distances. I have been asked to reply.

The Stopping distances quoted in the Highway Code have not changed for many years. They were first included in the third edition of the Highway Code, published in 1946, and were originally introduced to give road users, other than motorists, an indication of the typical distance a motorised vehicle would need to come to a halt. The stopping distances shown (for 20 mph to 50 mph) were the same as the corresponding speeds in the current Code. The only differences now are that speeds of 60 mph and 70 mph are also included and that both metric and imperial measures are given. The reason for the selection of these figures has now passed into history.

Over the years when amendments have been made to the Highway Code, consideration has been given to changing these distances. The stopping distance in the Highway Code is calculated on a deceleration rate of 6.6 m/s², a performance easily exceeded by a modern motor car. If a deceleration figure was being selected today, it is likely to be 5.0 m/s², as this is the minimum performance required for a motor vehicle to achieve at the annual test.

The figure in The Highway Code for “driver thinking” time (0.67 seconds) was established by research many years ago but has been verified by recent research conducted in 1997/8. This research tested drivers in four groups: Males aged 25 – 35; males aged 50 – 60; females aged 25 – 35; females aged 50 – 60. The results showed that younger females and older males had the best reaction time. The younger females were very light on the brakes and failed to make full use of the braking potential. The younger males were slower to react but more forceful on the brakes. The times measured ranged from 0.32 to 0.94 seconds with a mean of 0.57 seconds. It was concluded that under real world conditions the time would not be significantly different from the original 0.67 seconds.
The stopping distances in the Code are for guidance. The heading in the current edition was changed from 'Shortest Stopping Distances' to 'Typical Stopping Distances' to reflect this. Road users need to be aware of other factors that affect overall stopping distances, such as the type of vehicle, whether a vehicle is travelling uphill or downhill, the age and type of vehicle, the condition of the brakes and the loading of the vehicle. Weather conditions may also affect the distance in which a vehicle is able to stop. While considerable advances have been made in braking technology in recent years, the factors listed above all need to be taken into consideration.

Yours sincerely,

JOHN DOYLE
Dear Frank Cullinane

Highway Code Stopping Distance formula incorrect

Thank you for your email of 22 March, addressed to Gareth Llewellyn at the Driving Standards Agency, about stopping distances in The Highway Code. I have been asked to reply.

The Stopping distances quoted in the Highway Code have not changed for many years. They were first included in the third edition of the Highway Code, published in 1946, and were originally introduced to give road users, other than motorists, an indication of the typical distance a motorised vehicle would need to come to a halt. The stopping distances shown (for 20 mph to 50 mph) were the same as the corresponding speeds in the current Code. The only differences now are that speeds of 60 mph and 70 mph are also included and that both metric and imperial measures are given.

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Rule 126 of the Code advises to drive at a speed that will allow you to stop well within the distance you can see to be clear. Rule 154 of the Code advises that you should take extra care on country roads and reduce your speed at approaches to bends, which can be sharper than they appear, and at junctions and turnings which may be partially hidden.

The Highway Code has historically undergone a major revision approximately every ten years (with the last major revision occurring in 2007). We currently have no plans to carry out another revision. When we carry out the next revision to the Code we will as usual undertake a consultation on proposed changes to the code.

I hope this is helpful.

Yours sincerely

JOHN DOYLE