

Road safety factsheet: Sat Nav devices

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Digital navigation systems work by using satellites to track the position of the car. The satellites monitor a vehicle's heading, speed, and co-ordinates, which are then cross-referenced against a roadmap or database of zones stored aboard the car. They can then give the driver directions to a destination by comparing the vehicles heading and co-ordinates with the layout of the road network. Several different types of sat navs are available to drivers, such as standalone devices, apps on mobile phones or ones that are built into the vehicle itself.

The use of digital navigation devices is becoming more common, with around 76 per cent of drivers using sat nav for their journeys¹. To ensure new drivers learn how to use digital navigation devices safely change in the learner driver test changed on 4th December 2017, to include most candidates being asked to follow directions from a Sat Nav².

A well-used Sat Nav can help drivers plan routes and prevent drivers from making last minute lane changes or hesitating because they are not sure of the directions, however a badly used sat nav can cause a distraction and increase the risk of a collision.

A sat nav can distract a driver physically through the manual entry of their destination details, visually, by looking at the electronic map or cognitively when the driver focuses their attention on turning instructions or entering their destination into the system³. It is important that drivers understand how best to use their sat nav and learn not to use it when it may be dangerous to do so. The driver should never re-programme a journey whilst the vehicle is moving or in stationary traffic.

Tips on the safe use of sat navs:

- **Plan your journey in advance:** Planning a journey in advance can reduce the driver's reliance on the sat nav at dangerous times and will also help you think about where you may need or want to take a rest from driving

¹ Peter Vardy (undated) Do Young Drivers Rely on Sat Navs?: Accessed December 2023

² GOV UK (2017) 'Driving test changes: 4 December 2017' URL: <https://www.gov.uk/government/news/driving-test-changes-4-december-2017>: Accessed December 2023

³ Young, K. et al (2003) 'Driving Distraction: A Review of the Literature':

http://www.monash.edu/_data/assets/pdf_file/0007/217177/muarc206.pdf: Accessed December 2023

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- **Position the sat nav safely, out of the way of airbags and not obstructing a driver's vision:** The Highway Code states that windscreens and windows **MUST** be kept clean and free from obstructions to vision. Ensure that your device is secure and/or is connected properly to the cars infotainment system before you set off.
- **Sat navs will on occasion direct the vehicle down very narrow urban and country roads:** Take note of any weight restrictions as the route may not always be suitable and in the case of HGV permissible.
- **Find a method of using the sat nav that is not distracting to you:** Before driving, input your destination and check that your device is secure. If your device is connected to the cars infotainment system then put your device away and out of reach, ensuring voice controls are activated. If you need to make any changes to your route, do so when safely parked.
- **Always make the same observations to keep you safe that you would without the sat nav**
- **Organisations must ensure that staff can use sat navs safely:** Even if an organisation has not provided the sat nav system and their employee who is using it whilst at work owns it, they must still ensure that drivers are not using it dangerously.

Speed enforcement warning devices and apps

There are several devices and phone apps available on the market that can alert drivers to the presence of speed cameras and collision black spots. They are marketed and sold on the basis that they aim to prevent collisions.

Although drivers are informed about the dangers of the road ahead via road signs and the speed limits of the road, these devices can provide additional information about some areas where drivers need to take extra care - for example around schools and on stretches of road with a crash history.

The Road Safety Act 2006 has made fitting or using a device that detects or interferes with equipment used to assess a vehicles speed illegal. Devices that warn drivers that they are in an area where cameras are used to enforce the speed limit are not illegal, as they do not "detect" the camera itself.

Speed Enforcement Warning Devices that work in this manner should not be used as a replacement for good observation of the road and vehicle speed. Drivers should use them as a reminder to check their speed, not as a prompt to only slow down in areas where they are more likely to get caught for speeding. Traffic police or other speed enforcement can still catch drivers who are breaking the speed limit in areas that are not included in the system.