Footpath level crossings animation

The Office of Rail and Road is the independent economic and safety regulator for Britain's railway.

Level crossings are where a railway line is crossed by a right of way, like a road or footpath on the level, without a tunnel or bridge.

Great Britain's level crossings, although amongst the safest in Europe, still pose a significant safety risk to the public.

ORR has produced guidance to help people who carry out level crossing risk assessments. This case study illustrates how the guidance might be applied at a footpath crossing.

This is a footpath level crossing.

People can cross safely by following the instructions, checking if a train is approaching by looking in both directions, and listening for trains before crossing.

In this example, there are plans to increase the frequency and speed of trains on the line. This would give passengers a better service.

The increased speed of the trains might mean the time users have to see an approaching train is no longer suitable. But before any changes are made, a new risk assessment is needed.

The railway operator needs to consider how this will affect the crossing, and what changes might be needed, once the trains are faster.
Evidence needs to be gathered fast. The railway operator talks with people about the crossing. They might have concerns about noise, about the crossing staying open, and how much the changes might cost.

After analysing the evidence and completing a risk assessment, it is clear that the crossing needs to change to keep it safe if train speeds increase, otherwise people would not have enough time to judge if it is safe to cross.

Changes will need to be made before introducing more frequent trains at high speeds. The Office of Rail and Road’s guidance is designed to support the assessment and control of level crossing risks.

The railway operator identifies several options to improve safety. Each option is considered in turn, the first option considered is closure, without providing an alternative route, or close it and direct people to another place to cross. These are not reasonably practicable options, as there are no alternative crossing places nearby.

The crossing could be replaced by a bridge or underpass. These are not solutions at this crossing because of the local environment.

Engineering solutions are then considered. Miniature stoplights are used at the crossing to warn of approaching trains, the miniature stoplight changes from green to red when a train is approaching. It also has an audible alarm. This makes the crossing safer to use once trains are travelling at higher speeds.

This is just one potential issue of this crossing, there could be others to consider in the same risk assessment, such as: uneven surfaces, vegetation growth, or changes in how many people use the crossing, such as for local events.

The Office of Rail and Road’s ‘Principles for Managing Level Crossing Safety’ guidance helps all railway operators understand the wide range of safety issues at all types of level crossings.

The guidance and more information about level crossings is available on our website.