

The Network Rail (Cambridgeshire Level Crossing Reduction) Order

Network Rail Note: 001

1. Risk Profile of Network Rail's national level crossing estate

- 1.1. On 01 April 2014 (i.e. Day 1, Control Period 5), the risk profile of Network Rail's national level crossing estate was 12.62 FWI.
- 1.2. This figure has continued to evolve during the months since. Risk reduction schemes have removed risk from the network at many level crossings. At the same time, risk has increased at others due to identified changes in user numbers and behaviour. Accordingly, the risk profile of Network Rail's national level crossing estate at Period 8, Year 4, Control Period 5 (i.e. November 2017) was recorded as 11.61 FWI.
- 1.3. Level crossing risk is not distributed evenly across the 6,000-strong level crossing estate.
 - 10% of all crossings account for 75% of the total FWI.
 - 20% of all crossings account for 89% of the total FWI.
- 1.4. Viewing this another way, the combined risk associated with 4,800 of Network Rail's level crossings amounts to just 11% of the national total.

2. Risk Reduction Benefit

- 2.1. In Paragraph 2.3.2 of the Summary Proof of Evidence of Dr. Eliane Algaard, she states that the Cambridgeshire Order provides a risk reduction (FWI) saving of 0.030. Extended to five decimal places, this figure is 0.03047 FWI.
- 2.2. This FWI value was based on the closure and rationalisation of 29 level crossings.
- 2.3. Following the submission of evidence, four level crossings were withdrawn from the order as follows:
 - C3 – West River Bridge
 - C8 – Ely North Junction
 - C9 – Second Drove
 - C13 – Middle Drove
- 2.4. The revised risk reduction (FWI) saving associated with the Cambridgeshire Order is 0.03008 FWI. This is based on the closure and rationalisation of 25 level crossings.
- 2.5. If the Cambridgeshire Order's risk reduction benefit was averaged across the 25 crossings to give a mean benefit per crossing, the resultant value of 0.00120 FWI per crossing could be considered equivalent to closing the 1,434th highest risk crossing on the network. This places it within the upper quadrant of our risk ranking of all 6,000 crossings. Of course, the Order would close this 1,434th highest risk crossing 25 times over.

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- 2.6. On this basis, it is clear that proposals set out by the Cambridgeshire Order offer meaningful safety benefits that stand up to scrutiny when considered alongside Network Rail's national level crossing risk profile.

Note prepared by:

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